

In The Matter Of:

*BLUE CROSS AND BLUE SHIELD v.
PHILIP MORRIS*

JON A. KROSNICK

March 12, 2001

SPHERION DEPOSITION SERVICES

545 FIFTH AVENUE, SUITE 900

NEW YORK, NY 10017

(212) 490-3430

*Original File 03121KRO.V1, 316 Pages
Min-U-Script® File ID: 3910471927*

Word Index included with this Min-U-Script®

CC: CMF

52434 5485

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

BLUE CROSS AND BLUE SHIELD)
OF NEW JERSEY, et al.)
Plaintiffs,)
Case No.)
vs.) 98 Civ. 3287 (JBW)
PHILIP MORRIS, INCORPORATED,)
et al.)
Defendants.)

March 12, 2001
9:36 a.m.

Continued videotaped deposition of
JON A. KROSNICK, held at the offices of
Arnold & Porter, 399 Park Avenue, New York,
New York, pursuant to adjournment of the
Cary N. Bigelow, RPR, a Notary Public of the
State of New York.

APPEARANCES

DEWEY BALLANTINE LLP
Attorneys for Plaintiff Blue Cross and
Blue Shield of New Jersey, Inc.
1301 Avenue of the Americas
New York, New York 10019-6092
BY: MICHAEL C. HEFTER, ESQ.
PAUL BSCHORR, ESQ. (a.m. session)
JASON HARMAN, ESQ.

ARNOLD & PORTER
Attorneys for Defendant Philip Morris, Inc.
555 Twelfth Street, N.W.
Washington, D.C. 20004-1206
BY: PETER BLEAKLEY, ESQ.
AMY K. PHILLIPS, ESQ.
ROBERT A. McCARTER III, ESQ.

SEDGWICK, DETERT, MORAN & ARNOLD
Attorneys for Brown & Williamson
One Embarcadero Center
San Francisco, California 94111-3628
BY: KEVIN J. DUNNE, ESQ.

APPEARANCES

SIMPSON THACHER & BARTLETT
Attorneys for Defendant B.A.T. Industries, p.l.c.
425 Lexington Avenue
New York, New York 10017-3954
BY: ADAM I. STEIN, ESQ.

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC
Attorneys for Defendant R.J. Reynolds Tobacco Co.
One Atlantic Center
1201 West Peachtree Street, Suite 3500
Atlanta, Georgia 30309
BY: R. DAL BURTON, ESQ.

COLLIER SHANNON SCOTT, PLLC
Attorneys for Defendant R.J. Reynolds Tobacco Co.
3050 K Street, N.W., Suite 400
Washington, D.C. 20007-5108
BY: JOHN B. WILLIAMS, ESQ.

ALSO PRESENT:
ROBERT FENILI
TOM KRAUSE, Videographer

7-09:33:13 25-09:37:58

Krosnick
JON A. KROSNICK, called as a
witness, having been duly sworn by a Notary
Public, was examined and testified as
follows:

EXAMINATION BY
MR. BLEAKLEY:

Q: Good morning, Dr. Krosnick.
A: Good morning.
Q: You understand that this is the
continuation of your deposition in this case?
A: I do.
Q: And that you are still under oath?
A: Yes.
Q: The last deposition, the first day of
this deposition was taken on February 12. Do you
remember that?
A: Yes, I do.
Q: Have you done any work on this case
since February 12th?
A: Yes, I have.
Q: What work have you done?
A: I have been reading materials relevant
to the case, almost all of which are part of the
materials that I understand have been turned over

52434 5486

2-09:38:00 25-09:39:41 Page 283
Krosnick
(1) to you some time ago, prior to my last deposition.
(2) There are some new materials, though, that I have
(3) read that have not been included in that earlier
(4) batch.
(5) I have also done statistical analysis of
(6) the SRBI survey data. I have also done some
(7) thinking about and gained some information about
(8) the depositions that I analyzed.
(9) Q: Anything else?
(10) A: Not that I remember at the moment.
(11) Q: Approximately how many hours have you
(12) spent working on this case and doing the things
(13) that you just described since February 12?
(14) A: Approximately 25 to 30, but I would have
(15) to consult my records to be sure.
(16) Q: You are pretty confident it isn't more
(17) than 30 hours?
(18) A: It could be 31. It's in the range, plus
(19) or minus.
(20) Q: Have you had any meetings with counsel
(21) for or representatives of the plaintiff in this
(22) case since then?
(23) A: Yes.
(24) Q: How many times have you met with them?

2-09:39:50 25-09:40:52 Page 284
Krosnick
(1) A: Once. Excuse me, twice.
(2) Q: When was that?
(3) A: Yesterday and this morning.
(4) Q: How many hours did you spend meeting
(5) with counsel yesterday and this morning?
(6) A: I would say 30 minutes this morning and
(7) five hours yesterday.
(8) Q: This meeting was with Mr. Hefter?
(9) A: Yes.
(10) Q: And Mr. Bschorr?
(11) A: Yes.
(12) Q: Anyone else?
(13) A: Mr. Hoffman.
(14) Q: Anyone else?
(15) A: No.
(16) Q: Let's go back to the work that you said
(17) you had done between February 12th and today.
(18) First, you said you reviewed materials, including
(19) rereviewing some of the materials you had seen
(20) before and also some new materials, right?
(21) A: Yes.
(22) Q: What are the materials that you had
(23) reviewed before that you reviewed again?
(24) A: I didn't say that I had reviewed them

2-09:40:55 25-09:42:19 Page 285
Krosnick
(1) before. I said that it was my understanding that
(2) they had been turned over before to you.
(3) Q: Okay.
(4) A: These were things that I had been given
(5) previously but hadn't read until recently and they
(6) are primarily publications by Kip Viscusi.
(7) I have also, since the last deposition
(8) reread my own reports and my deposition transcript.
(9) Q: Anything else?
(10) A: I am sorry, anything else in which
(11) category?
(12) Q: Anything else that you had before that
(13) you reviewed between February 12 and today. You
(14) mentioned primarily Viscusi publications. I want
(15) to know if there are publications and materials
(16) other than those produced by Professor Viscusi.
(17) A: I think I read 10 to 15 pages of an
(18) article or report by John Hanson, I believe his
(19) name is, but that would be it.
(20) Q: So you reread your reports in this case,
(21) you read the transcript of your deposition on
(22) February 12, you read some Viscusi publications and
(23) you read a paper prepared by John Hanson.
(24) A: Yes.

2-09:42:19 25-09:43:38 Page 286
Krosnick
(1) Q: Anything else?
(2) A: Of materials that I had been given
(3) before?
(4) Q: Yes.
(5) A: Not that I remember.
(6) Q: In reviewing your deposition transcript
(7) from February 12, did you find anything that was
(8) wrong or that you want to change or correct?
(9) A: I found a few sentences, maybe two to
(10) three, where I am quite sure there was a
(11) transcription error, but I don't — but I didn't
(12) consider them serious enough to raise — I have
(13) never been asked to evaluate the accuracy of that
(14) or to report any transcription errors that might
(15) have occurred, but I don't remember anything, other
(16) than transcription errors that I noticed that was
(17) incorrect or needing repair.
(18) Q: What was the reason why you were
(19) reviewing a paper written by John Hanson?
(20) A: It was among materials that I have been
(21) given by Dewey Ballantine as potentially helpful in
(22) this case, so I am working my way through those
(23) materials.
(24) Q: What are the new materials that you have

2-09:43:41 25-09:45:41

Page 287

(1) *Krosnick*
(2) been provided? I take it, when you say new
(3) materials, are these new materials that have been
(4) provided to you by Dewey Ballantine?
(5) A: Some are and some are materials that I
(6) got on my own.
(7) Q: Let's start with the new materials that
(8) were provided by Dewey Ballantine. What do they
(9) consist of?
(10) A: One item is a report by the Roper survey
(11) organization to the Federal Trade Commission
(12) describing the results of survey data that Roper
(13) collected at the FTC's expense in 1980. I have
(14) been given information by Dewey Ballantine on the
(15) rates at which selected deponents were successfully
(16) deposed for the data set that I analyzed. I have
(17) been given information about the demographic
(18) characteristics of Blue Cross-Blue Shield claimants
(19) between the years 1992 and 1998. I have been given
(20) newspaper articles relevant to tobacco.
(21) I am sorry, just to make sure, can I
(22) hear the question again so I am --
(23) Q: The question is, what are the materials
(24) that have been provided to you since your
(25) deposition on February 12, provided to you by Dewey

2-09:45:45 25-09:47:50

Page 288

(1) *Krosnick*
(2) Ballantine, that you have reviewed?
(3) A: I got a document that's been referred to
(4) as the interrogatives in this, relevant to this
(5) case. What it contains is a listing of statements
(6) made either at press conferences or in the news
(7) media by tobacco industry employees over the years.
(8) I can't be more specific about what exactly that
(9) document is. It's been referred to with numbers
(10) like 62 and 63 or 63 and 64, something of that
(11) sort.
(12) I believe that's all.
(13) Q: Why were you provided these documents by
(14) Dewey Ballantine, if you know?
(15) A: Well, the newspaper articles and the
(16) interrogatives listing was at my request, because I
(17) was interested in learning more about statements
(18) made to the American public by the tobacco industry
(19) over the years. The information on the, what we
(20) might call the response rate for the depositions
(21) taken in this case from subscribers was also at my
(22) request to understand that process. The Roper
(23) study report was also made at my request because
(24) that was a survey that I became aware of the
(25) existence of and felt --

2-09:47:52 25-09:49:11

Page 289

(1) *Krosnick*
(2) Q: How did you become aware of the
(3) existence of it?
(4) A: I saw it described in a fax that I
(5) received of visual displays that were used by
(6) Professor Viscusi in the Falise case during his
(7) testimony, so that would be another document I
(8) received and consulted since February 12th.
(9) Q: Would you describe that again for us,
(10) please?
(11) A: Yes. What I received was a fax with a
(12) reproduction with, I believe, of some or all of the
(13) visual displays used by Professor Kip Viscusi
(14) during his testimony in the Falise case, and one of
(15) those visual displays had a footnote indicating the
(16) data were taken from a 1980 Roper survey done for
(17) the Federal Trade Commission, and I had not been
(18) aware of the existence of that survey before, so I
(19) asked to get a report on the results.
(20) Q: So you were provided by Dewey Ballantine
(21) with a copy of this; is that right?
(22) A: Yes, I was.
(23) I am sorry, one other thing I have
(24) remembered that I received was yet another
(25) unreadable copy of the primary survey analyzed by

2-09:49:15 25-09:50:24

Page 290

(1) *Krosnick*
(2) Professor Viscusi in his book about smoking. I
(3) continue to look forward to getting a readable copy
(4) of that.
(5) Q: Okay, so the new materials that were
(6) provided to you by Dewey Ballantine since February
(7) 12 have been the Roper materials for the FTC that
(8) you just talked about, something that you described
(9) as response rates for the deponents in the
(10) so-called deposition survey; is that right?
(11) A: Right.
(12) Q: Thirdly, some demographic information
(13) for Blue Cross claimants from 1992 to 1998?
(14) A: Yes.
(15) Q: Newspaper articles containing statements
(16) made by the tobacco industry; is that correct?
(17) A: Yes.
(18) Q: And finally, a fax reproduction of
(19) demonstrative exhibits that Professor Viscusi used
(20) in the Falise trial?
(21) A: Yes. And you left out the
(22) interrogatives.
(23) Q: And finally what you described as
(24) interrogatives. I want to ask you little bit more
(25) what you mean by interrogatives.

2-09:50:25 25-09:51:33 Page 291
Krosnick
(1) Do you mean interrogatories?
(2) A: I could very well mean that.
(3) MR. HEFTER: I think that's what he
(4) means, Peter.
(5) Q: Are these interrogatories which are
(6) questions or interrogatory answers or both?
(7) A: I can't tell you. It's a document
(8) that's probably at least 50 pages long and I
(9) quickly turned to the middle of it where it began
(10) listing descriptions of incidents in which tobacco
(11) industry employees made public statements either at
(12) press conferences or in media coverage and I just
(13) read that portion of it.
(14) Q: Was this information information that
(15) was being provided by the defendants in this case
(16) or information that was being provided by the
(17) plaintiffs in this case?
(18) A: I don't know for sure.
(19) MR. HEFTER: Peter, to move this along,
(20) we can stipulate that it was our responses
(21) to your interrogatories 68 and 69.
(22) MR. BLEAKLEY: Thank you.
(23) Q: Now, you said that you have also
(24) reviewed since February 12 some materials that you
(25)

2-09:51:36 25-09:53:07 Page 292
Krosnick
(1) got on your own. What are those?
(2) A: I got about a dozen books published
(3) between 1999 and 2000 relevant to the tobacco
(4) industry.
(5) Q: Can you describe them for us?
(6) A: Some of these are academic books some
(7) are what you might call more popular press books,
(8) reviewing the history of tobacco use over the years
(9) and behavior of tobacco companies.
(10) Q: Can you give us a couple of examples?
(11) A: One book I recall might have been called
(12) "Smoked: Why Joe Camel is Still Smiling." Another
(13) one might have been called "The Tobacco Wars," but
(14) I am afraid I won't remember more titles or authors
(15) than that.
(16) Q: Anything else?
(17) MR. HEFTER: Anything else he can
(18) recall?
(19) MR. BLEAKLEY: I am only asking what
(20) he can recall.
(21) MR. HEFTER: I understand that. It
(22) got lost in the translation.
(23) Q: Anything else you reviewed on your own
(24) that is not as the result of being provided them by
(25)

2-09:53:08 25-09:54:35 Page 293
Krosnick
(1) Dewey Ballantine since February 12.
(2) A: Yes. I have examined data from the 1998
(3) national health interview survey done by the
(4) Centers for Disease Control, National Center for
(5) Health Statistics.
(6) I am sorry, can I hear the question one
(7) more time?
(8) Q: Yes. What I am asking you is to
(9) identify for us all of the materials that you have
(10) reviewed since February 12th, since your last
(11) deposition, on your own. That is not materials
(12) that were provided to you by Dewey Ballantine.
(13) A: I am not remembering anything else at
(14) the moment.
(15) Q: Anything other work you have done since
(16) February 12th?
(17) A: Thank you. I just remembered two
(18) additional documents I have not mentioned that I
(19) looked at.
(20) These were reports submitted by two
(21) experts with regard to the depositions. One is by
(22) a gentleman whose name I believe is Dr. Semenik.
(23) The second one is a report provided by someone who
(24) I believe is a historian whose name I do not
(25)

2-09:54:39 25-09:55:45 Page 294
Krosnick
(1) remember.
(2) Q: DeBacco (phonetic)?
(3) A: That could be it, yes.
(4) Q: Were those provided to you by Dewey
(5) Ballantine?
(6) A: Yes, they were.
(7) Q: Can you think of anything else that you
(8) were provided and that you have reviewed that was
(9) provided by Dewey Ballantine or which you got on
(10) your own or with the help of a research assistant
(11) or anyone else?
(12) A: I am not remembering anything else at
(13) the moment.
(14) Q: And you think that you have spent
(15) between 25 and 30 hours on these materials; is that
(16) right?
(17) A: Yes.
(18) Q: Does that include the approximately five
(19) hours that you met yesterday with counsel for
(20) plaintiff?
(21) A: No.
(22) Q: So it's 30 hours, 25 to 30 hours
(23) reviewing materials and another five hours or so
(24) preparing for this deposition yesterday and this
(25)

2-09:55:48 25-09:57:50

Page 295

Krosnick

(1) morning?

(2) A: It could be, but I want to be clear. I
(3) don't have a vivid sense of how many hours I have
(4) spent.

(5) Q: Let me ask you a couple of general
(6) questions before asking you some specific questions
(7) about these materials you have reviewed.

(8) As the result of your review of these
(9) materials since February 12, have you developed any
(10) new opinions that you intend to offer in this case
(11) as a result thereof?

(12) A: Yes.

(13) Q: What are they?

(14) A: I have done a number of examinations of
(15) data that allow me a basis for offering the opinion
(16) that the SRBI data reported in my written report
(17) earlier are representative of various
(18) subpopulations within the country in terms of the
(19) key variables examined in my analysis.

(20) I have also reviewed materials that give
(21) me the basis for offering the opinion that
(22) individuals who filed claims with Blue Cross-Blue
(23) Shield in 1998 and who were ever smokers resemble
(24) individuals who filed claims between 1992 and 1997

2-09:58:00 25-10:00:35

Page 296

Krosnick

(1) with Blue Cross-Blue Shield and who were ever
(2) smokers and I have formed the opinion that the
(3) nonresponse rate in gathering the depositions for
(4) this case was very small and I have seen materials
(5) now that provide a basis for my offering an opinion
(6) about the statements made by tobacco companies to
(7) the American public and politicians through the news
(8) media with more detail than I was able to
(9) previously.

(10) MR. BLEAKLEY: Would you read that back,
(11) please.

(12) (Record read.)

(13) A: I am able to offer an opinion now about
(14) the representativeness of the SRBI sample in a way
(15) that I was not previously able to.

(16) I believe that's all.

(17) Q: Did you develop these — as I counted
(18) it, there were five opinions at the request of
(19) counsel for the plaintiffs in this case?

(20) A: No, I did not.

(21) Q: You developed these on your own?

(22) A: Yes, I did.

(23) Q: All right. Let's take them one by one.
(24) Starting with the last one, I believe

2-10:00:39 25-10:01:59

Page 297

Krosnick

(1) what you said is that you were able to develop an
(2) opinion about the representativeness of your SRBI
(3) sample in a way that you could not previously do
(4) so. Would you explain for us how you were able to
(5) reach this opinion, which of the materials you have
(6) reviewed since February 12, 2001 that made that
(7) possible?

(8) A: During my last deposition, the first
(9) deposition, a question was asked about whether I
(10) had done any analysis to compare the composition of
(11) the SRBI sample to the country as a whole to assess
(12) its representativeness, and at the time I answered
(13) that that was not possible, because that sort of
(14) analysis is typically done by comparing the survey
(15) results with census bureau data that are routinely
(16) taken to indicate with very high accuracy the
(17) demographic characteristics of the country as a
(18) whole, and I explained that is not possible for
(19) this survey because we did not collect demographic
(20) information from all of the respondents. We only
(21) collected demographic information from people who
(22) reported they were currently or were former
(23) cigarette smokers.

(24) In the interest of addressing this

2-10:02:00 25-10:03:22

Page 298

Krosnick

(1) issue, I decided to use an approximation approach
(2) to it that I have not seen done routinely before.
(3) That involved finding an alternative high quality
(4) federal government survey that identified current
(5) and former smokers done recently, measured their
(6) demographic characteristics, and then generated
(7) those figures to compare with the demographic
(8) characteristics of current and former smokers in
(9) the SRBI data set.

(10) Q: I am afraid I don't understand how that
(11) makes it possible for you to reach the opinion that
(12) it was representative when at your deposition on
(13) February 12, you were unable to do so. You are
(14) going to have to explain that a little more to me.

(15) A: As I said, the standard approach to
(16) assessing representativeness in terms of
(17) demographic characteristics would be to compare
(18) census bureau data. But we don't have census
(19) bureau data available that I am aware of that
(20) identify current and former smokers and that allow
(21) for that analysis, so what I am doing is to use an
(22) alternative approach that you might call
(23) triangulation, that's a term that we often use,
(24) where you use multiple methods to try to measure

2—10:03:24 25—10:04:38 Page 299
Krosnick
(1) the same thing and the more agreement between those
(2) multiple methods, the more confidence you have in
(3) the validity of measurements from any one of them.
(4) In this case I analyzed national health
(5) interview survey data. Now, this is a survey with
(6) more than 300,000 interviews done during 1998, so
(7) that's a large sample size. The response rate for
(8) that survey is about 73 percent, and so 73 percent
(9) is not 100 percent and that, therefore, makes it
(10) different from some census bureau data that we
(11) often look at where the response rate is closer to
(12) 100 percent, but in this case, I considered this a
(13) legitimate set of data using a different approach
(14) to measure the demographic characteristics of
(15) current and former smokers, and so therefore, I
(16) looked at the correspondence of the SRBI data to
(17) those data, and seeing that correspondence enhanced
(18) my confidence in the representativeness of the
(19) sample, and let me be clear that during my last
(20) deposition, I did express confidence in the
(21) representativeness of the sample and I now have a
(22) new basis to add to my earlier basis for that
(23) judgment.
(24) Q: Your testimony is that in your prior
(25)

2—10:04:40 25—10:06:00 Page 300
Krosnick
(1) deposition, you expressed confidence in the
(2) representativeness of the sample, is that right?
(3) A: Yes, yes.
(4) Q: You also said that one of the new
(5) opinions that you were able to develop since
(6) February 12 was that the SRBI data were — or the
(7) SRBI survey was representative of various
(8) subpopulations. What subpopulations is it
(9) representative of?
(10) A: I have broken the SRBI data in a couple
(11) of ways. First, I have just in the interest of
(12) sort of an arbitrary comparison, isolated
(13) individuals who live in the northeast region and
(14) the midwest region of the U.S. combined and
(15) compared that group to individuals living in the
(16) south and west regions of the country combined in
(17) an effort to explore the reliability of the results
(18) in the sense where reliability means replicability.
(19) Are the results the same when we examine two
(20) subgroups in the population where there is no
(21) strong theoretical basis in advance for expecting
(22) them to differ and found that the two subgroups
(23) resemble each other quite closely in terms of their
(24) perceptions of relative risks and in terms of the
(25)

2—10:06:03 25—10:07:17 Page 301
Krosnick
(1) impact of our manipulation, exposing people to
(2) quotes by the Surgeon General and tobacco industry
(3) employees.
(4) I also did an analysis where I isolated
(5) respondents who live in the northeast region and
(6) are current Blue Cross-Blue Shield subscribers.
(7) That group gets about as close as those survey data
(8) permit to identifying individuals who resemble
(9) Empire Blue Cross-Blue Shield subscribers, and I
(10) found that the distributions of the key variables
(11) in my analysis, the perceptions of relative risk
(12) and the smoking regret and desire to quit scale
(13) look very, very comparable in that subgroup to the
(14) full sample and to the two regions.
(15) Q: What is the new material that you have
(16) reviewed since February 12 that made it possible
(17) for you to reach this conclusion?
(18) A: New statistical analyses that I
(19) conducted.
(20) Q: What new statistical analyses that you
(21) conducted?
(22) A: The ones I just described.
(23) Q: Have they been produced to us?
(24) A: I don't believe so, no.
(25)

2—10:07:21 25—10:08:08 Page 302
Krosnick
(1) REQ MR. BLEAKLEY: We want them.
(2) MR. HEFTER: I will take it under
(3) advisement.
(4) MR. BLEAKLEY: Under advisement? We
(5) want them before this morning. I would like
(6) them today. I would like them so we can use
(7) them in this deposition. They should have
(8) been provided to us before today. The
(9) notice of this deposition had attached to it
(10) a schedule of documents that is the standard
(11) form of schedule of documents that is
(12) attached to every deposition notice for
(13) every expert that's been in this case, and
(14) as far as we're concerned, you had an
(15) obligation to look at that and to obtain and
(16) provide to us in advance of this deposition
(17) anything that forms the basis for opinions
(18) that he's going to express at trial.
(19) We are going to want to take his
(20) deposition again before he testifies if
(21) there are — if actually there is a document
(22) here or if there are any other analyses of
(23) this kind.
(24) I just want to put that on the record
(25)

2--10:08:10 25--10:14:53

Page 303

Krosnick

1 at 10:10 this morning so that you can send
2 somebody out to get that stuff right now.
3 A: If it's useful, these were done last
4 night.

5 MR. WILLIAMS: Then he must have them.

6 MR. HEFTER: Why don't we take a break
7 and we can talk about it, if that's what you
8 would like to do.

9 MR. BLEAKLEY: What I want to know is
10 how much more of this I am going to find.

11 We can go off the record.

12 MR. WILLIAMS: No, I want this on the
13 record. I want to know how much else they
14 have.

15 MR. BLEAKLEY: Let's go off the record
16 and then we will put it all on the record.

17 THE VIDEOGRAPHER: The time is 10:09
18 a.m. and we are going off the record.

19 (Recess taken.)

20 THE VIDEOGRAPHER: The time is 10:15
21 a.m. and we are back on the record.

22 BY MR. BLEAKLEY:

23 Q: Before the break, Dr. Krosnick, I was
24 asking you about the new opinion that you say you

2--10:14:59 25--10:16:37

Page 304

Krosnick

25 are able to give about the representativeness of
26 various subpopulations in the SRBI data. What
27 subpopulations are we talking about?

28 MR. HEFTER: Objection.

29 A: The subpopulations that we described --
30 that I described to you earlier.

31 Q: Would you describe them again? I
32 apologize for asking you to do that again. Tell me
33 who they are.

34 A: A combination of individuals living in
35 the northeast and midwest regions, a combination of
36 the individuals living in the south and west
37 regions and individuals living in the northeast
38 region who are current Blue Cross-Blue Shield
39 subscribers or, excuse me, who were current Blue
40 Cross-Blue Shield subscribers at the time of the
41 survey.

42 Q: Is it your opinion that the SRBI survey
43 is representative of the population of Empire Blue
44 Cross subscribers who filed claims in 1998?

45 A: With regard to the variables that are
46 the focus of my analyses, I have looked for but
47 have not yet found any evidence to challenge the
48 idea that the patterns observed in the full

2--10:16:40 25--10:18:00

Krosnick

49 national sample are replicated in various subgroups
50 of the population. In, for example, the ones I
51 just mentioned as well as my original written
52 report, I compared Blue Cross-Blue Shield
53 subscribers from across the country to individuals
54 who had never been Blue Cross-Blue Shield
55 subscribers. The more such analyses that I do, the
56 more convinced I become that the patterns that are
57 the focus of my analysis generalize across many
58 subgroups in the population, and that gives me
59 greater confidence that those same patterns are
60 present in 1998 claim filers to Empire Blue
61 Cross-Blue Shield who are current or former
62 smokers.

63 Q: You said that one of the new opinions
64 that you have been able to develop is that Empire
65 Blue Cross subscribers who filed claims in 1998,
66 and I believe the word you used was resemble those
67 who filed between 1992 and 1997. Would you explain
68 to us how you came to that opinion?

69 A: Yes.

70 Q: And the materials that you reviewed upon
71 which you rely in developing that opinion.

72 A: I can't describe for you in detail

2--10:18:04 25--10:19:04

Page 305

Krosnick

73 exactly what the documents are, but I have seen
74 documents that I expect to obtain copies of in the
75 near future that provide statistical descriptions
76 of the gender balance and age balance of
77 individuals who filed claims with Empire each year
78 between 1992 and 1998.

79 Q: What do you mean when you say you have
80 seen and expect to be able to obtain copies by the
81 time you testify? What is it you have seen and how
82 do you expect to be able to obtain copies?

83 A: I saw them.

84 Q: Where?

85 A: They were handed to me.

86 Q: By whom?

87 A: By Dewey Ballantine lawyers.

88 Q: When?

89 A: Yesterday.

90 Q: What were they?

91 A: As I say, all I can tell you is they
92 were pieces of paper that described what I listed
93 for you. I can't tell you details other than that
94 my understanding is they come from data from
95 Empire's statistical files themselves on claims.

96 REQ MR. BLEAKLEY: We want these, too.

2--10:19:06 25--10:20:00 Page 307
Krosnick
(1) MR. HEFTER: We will provide those to
(2) you. Some of them you already have.
(3) A: I am not sure I completely answered that
(4) question.
(5) You wanted to know what you mean by --
(6) when I expected to receive them in the future. My
(7) understanding is they are being Xeroxed for me to
(8) have a copy of, so I just simply haven't gotten
(9) them, but I expect to.
(10) MR. BLEAKLEY: Just so there is no open
(11) question on this, this man is still
(12) developing opinions based on materials you
(13) are providing him yesterday and today and we
(14) are going to want his deposition again
(15) before he testifies in this case.
(16) MR. HEFTER: You will have his
(17) material around lunchtime, you can take a
(18) look at it then. You will be have plenty of
(19) time to look at it and --
(20) MR. BLEAKLEY: I am not obliged to
(21) prepare for a deposition in the middle of a
(22) deposition. I am just alerting you to the
(23) fact that we want any materials that he is
(24) reading and reviewing and the basis of which

2--10:20:06 25--10:21:04 Page 308
Krosnick
(1) he is going to testify or develop opinions
(2) about which he is going to testify and we
(3) are going to want to take his deposition
(4) again when that happens.
(5) MR. HEFTER: We will have to cross
(6) that bridge when we come to it.
(7) Q: Was this demographic data for smokers or
(8) both smokers and nonsmokers, if you know?
(9) A: Smokers and nonsmokers, I believe all
(10) claim filers.
(11) Q: Did it include data for former smokers?
(12) A: I believe so, yes.
(13) Q: Was it aggregated or segregated for
(14) smokers, nonsmokers and former smokers?
(15) A: I believe it is not segregated for those
(16) groups.
(17) Q: Another opinion that you said you have
(18) been able to develop since February 12 is that the
(19) nonresponse rate in the deposition survey was very
(20) small.
(21) Would you explain to us how you came to
(22) that opinion and the basis for it and whatever
(23) materials you reviewed in coming to that opinion?
(24) A: I received an e-mail late last night

2--10:21:07 25--10:22:03 Page 309
Krosnick
(1) from Jason Harman listing for me the details of all
(2) individuals who were selected to be deposed but
(3) ultimately were not deposed as a part of that
(4) exercise and, I am sorry, what was the rest of the
(5) question?
(6) Q: I wanted you to describe the basis for
(7) the opinion and whatever you have reviewed that
(8) allows you to come to that opinion.
(9) A: I have fully answered your question.
(10) Q: So the basis for the opinion is what you
(11) received in this e-mail?
(12) A: Yes.
(13) Q: And you are relying on that?
(14) A: Yes.
(15) REQ MR. BLEAKLEY: We want that, too.
(16) MR. HEFTER: You can have it at
(17) lunchtime. He also said that you have the
(18) same available, information available to you
(19) as well.
(20) MR. BLEAKLEY: I don't have available
(21) to me what he relied on. It may be buried
(22) in other materials, but what we are entitled
(23) to is what he relied on.
(24) MR. HEFTER: As I said, you can have

2--10:22:05 25--10:22:51 Page 310
Krosnick
(1) it at lunchtime.
(2) Q: Do you know whether this is the number
(3) of people that the survey organization tried to
(4) call? Is that what you are talking about here?
(5) A: No, it is not.
(6) Q: Does it include the number of -- you
(7) know this was done by Audits & Surveys?
(8) A: Yes, I do.
(9) Q: And you know they made calls to people?
(10) A: Yes, I do.
(11) Q: When you talk about the nonresponse
(12) rate, you are including in the nonresponse rate the
(13) people that Audits & Surveys called who did not
(14) take the calls?
(15) A: No, I am not.
(16) Q: Are you including people who Audits &
(17) Surveys called but who hung up on them after they
(18) made the call?
(19) A: No. To be clear, I said it is people
(20) who were selected to be deposed but ultimately were
(21) not.
(22) Q: Do you know whether the material -- have
(23) you seen any material or are you relying on any
(24) information that tells you the number of people who

2-10:22:54 25-10:24:04

Page 311

Krosznick

1 were disqualified from the exercise by virtue of
2 the fact they were not smokers?

3 A: I am not sure at what stage you mean --

4 Q: At any stage.

5 A: I do -- yes, I have seen numbers on,

6 indicating that a very small number of individuals

7 who were selected to be deposed turned out not to
8 be smokers and therefore were not deposed.

9 Q: Do you know what percentage of people

10 who were called informed the caller that they were
11 never smokers?

12 A: Called by whom?

13 Q: Audits & Surveys.

14 A: No.

15 Q: So any such people or the number of such

16 people would not be included in your nonresponse
17 rate is that right?

18 A: Yes. Just to be clear, I didn't say

19 that I have a nonresponse rate. I saw information

20 with which to make judgments about nonresponse at
21 that particular stage of the process.

22 Q: Let me make sure I understand, then.

23 Is what you are saying is that the

24 nonresponse rate that you found to be adequate --

2-10:24:12 25-10:25:43

Page 312

Krosznick

1 is that right, or the response rate, you found to
2 be adequate; is that right?

3 A: I don't know whether I used the word
4 adequate or not earlier.

5 Q: What did you mean?

6 A: I think I said that the number of

7 individuals who were eligible to be deposed but
8 refused to do so was very small.

9 Q: Okay. When calculating a response or

10 nonresponse rate in a survey, is it not customary

11 to include those people who were called but not
12 deposed?

13 MR. HEFTER: Objection.

14 A: I am not sure what you mean by
15 "deposed."

16 Q: If a person was called and they either

17 refused to talk, hung up after a few minutes, or

18 said they were nonsmokers, Audits & Surveys called

19 them on the telephone and one of those three things

20 occurred, are those people customarily in a survey

21 included in the nonresponse rate?

22 MR. HEFTER: Objection to the form of

23 the question.

24 A: So are we -- I guess I am having trouble

2-10:25:46 25-10:26:56

Page 313

Krosznick

1 being sure I understand -- the nonresponse rate for
2 which survey? Is it the Audits & Surveys --

3 Q: The deposition survey, the first step of
4 which was conducted by Audits & Surveys.

5 A: Okay. Audits & Surveys did telephone
6 calling. I don't have the complete details on what
7 they did, but my understanding of what they did
8 approximates a survey procedure in some ways. If

9 you are asking me if I am going to generate a
10 response rate for that survey, if people refuse to
11 talk, they would certainly be counted as
12 nonrespondents.

13 Q: Do you know that for a fact?

14 A: I am saying, in normal procedure, we
15 would count them as nonrespondents.

16 Q: Do you know, in fact, whether that was
17 done here?

18 MR. HEFTER: Objection.

19 A: By whom?

20 Q: Audits & Surveys.

21 A: If it was counted as part of a
22 nonresponse rate?

23 Q: Yes.

24 A: I don't know. I have not seen any

2-10:26:58 25-10:28:07

Page 314

Krosznick

1 information on the nonresponse rate for Audits &
2 Surveys, so --

3 Q: Let me try to get at this a different
4 way.

5 As I understand it, the new opinion that
6 you were able to develop is that the nonresponse
7 rate in the deposition survey was very small; is
8 that right?

9 A: No.

10 Q: Then you tell me, what is the new
11 opinion that you have been able to develop with
12 respect to the response rate, the nonresponse rate
13 and the deposition survey.

14 A: As I hope I said earlier, the new
15 opinion is that a very small number of respondents
16 who were selected to be deposed refused to do so.

17 Q: What is the significance, if any, of
18 that fact or that finding to your opinions in this
19 case?

20 A: If that number had been large, then that
21 would raise the possibility that an overall
22 calculation of a response rate for the depositions,
23 as compared to its population, might be
24 significantly less than 90 percent, but in this

52434 5494

2—10:28:12 25—10:29:19 Page 315

(1) **Krosnick**
(2) case, because that figure was smaller than 10
(3) percent, it does not indicate that.
(4) Q: What is the significance of the fact
(5) that a response rate is less than 90 percent in
(6) surveys?
(7) A: It has no special significance. It's
(8) just it would be a way to describe the response
(9) rate.
(10) Q: If the response rate is too low, does
(11) that not bring into question the validity of the
(12) survey?
(13) MR. HEFTER: Objection.
(14) A: First of all, we would have to define
(15) too low, but I can answer your question without
(16) defining that.
(17) There is a growing body of research now,
(18) including a brand new article in the latest edition
(19) of Public Opinion Quarterly, showing that the
(20) response rate for a survey actually is unrelated to
(21) the validity and generalizability of the results.
(22) So, in other words, in comparisons that have pitted
(23) surveys with high response rates versus surveys
(24) with lower response rates, the accuracy of the data
(25) described in the population appears to be

2—10:29:21 25—10:30:28 Page 316

(1) **Krosnick**
(2) uncompromised by those lower response rates. So,
(3) in fact, it appears at the moment that the
(4) scientific literature suggests that response rate
(5) is not tied to the validity of the data
(6) necessarily.
(7) Q: Is it your opinion that response rate is
(8) irrelevant in determining the validity of a survey?
(9) A: I wouldn't say that it's irrelevant, but
(10) what I am saying is that a lower response rate does
(11) not in and of itself indicate lower validity and,
(12) in fact, this set of new studies that's been
(13) published in our literature indicates that low
(14) response rate surveys so far have not been shown to
(15) be substantially any more unrepresentative of the
(16) population than higher response rate surveys.
(17) Q: But I am asking for your opinion. I
(18) want your opinion.
(19) A: That is my opinion.
(20) Q: Your opinion is that a low response rate
(21) does not affect the validity of a survey; is that
(22) right?
(23) A: We would have to define low, of course,
(24) but, again, just to be clear, I do not judge the
(25) validity of the data personally, in my opinion,

2—10:30:30 25—10:31:25 Page 317

(1) **Krosnick**
(2) based upon the response rate for the survey for the
(3) reason I just outlined.
(4) Q: A moment ago you said that you wouldn't
(5) describe it as irrelevant. When does it become
(6) relevant?
(7) A: It's relevant to describing the
(8) procedures implemented.
(9) Q: Why?
(10) A: In other words, in all survey research,
(11) we always want to provide to people who might make
(12) use of the data or interpret the data, all facts
(13) about the procedures by which those data were
(14) collected.
(15) Q: Why is the response rate relevant?
(16) MR. HEFTER: Objection.
(17) A: As I say, it's one figure that provides
(18) information to people about how the survey was
(19) conducted.
(20) Q: Why are people interested in that
(21) information?
(22) MR. HEFTER: Objection.
(23) A: I am not sure if I should speak for why
(24) other people are interested in the information. I
(25) am not sure I could do a good job of that, but it's

2—10:31:30 25—10:32:42 Page 318

(1) **Krosnick**
(2) indication of the process by which the data were
(3) collected, and professionals are interested in all
(4) the details about the process.
(5) Q: Is there a response rate in surveys that
(6) is regarded as conventional or customary?
(7) MR. HEFTER: Objection.
(8) Q: Desirable response rate.
(9) A: Desirable? I guess I would say no,
(10) there is no particular response rate that is
(11) desirable in surveys.
(12) Q: So if I were to say to you that it is
(13) customary or conventional for a person conducting a
(14) survey to have at least 90 percent response rate,
(15) you would say I was wrong?
(16) A: I am sorry, could you say that again or
(17) just repeat it back just so I get it?
(18) Q: Well, I will ask the question
(19) differently.
(20) Isn't, in fact, a 90 percent response
(21) rate regarded as conventional or customary by
(22) people doing survey research?
(23) MR. HEFTER: Objection.
(24) A: By conventional or customary, do you
(25) mean common?

2—10.32:43 25—10.33:32 Page 319
Krosnick
Q: Let's start with common.
A: Okay.
Q: Would you —
A: A response rate in that area is common
for surveys done by the federal government. It is
not common for surveys done by anybody else.
Q: In your view, does a response rate of
less than 90 percent compromise the validity of the
survey?
A: No.
Q: In your view, does it make absolutely no
difference what the response rate is?
A: In my view, I have not seen evidence
to indicate that reduced response rate compromises
the validity of data.
Q: What if the response rate is 10 percent?
A: Same thing?
A: Yes. I have published work showing that
surveys with response rates in the neighborhood of
10 percent are actually more reliable than some
surveys with higher response rates.
Q: Why are they more reliable?
A: In that particular case, there are a lot
of specific answers and it has to do with the

2—10.33:34 25—10.34:52 Page 320
Krosnick
particular application to which the survey was put.
I can't give you a general answer.
Q: Isn't there a danger that when the
response rate is too low that there may be
important demographic differences between the
people who respond and those who don't respond?
MR. HEFTER: Objection.
A: Again, I don't know what too low is, but
the lower the response rate is not related to the
demographic representativeness of the sample, so
far as we have seen, and the reason for it is that
nonresponse in surveys, we are now coming to
recognize, comes from attributes of individuals
that are specific to the response process but
typically unrelated to the variables that we
measure.
Q: Let me ask it a different way.
In a survey that is going to ask the
kinds of questions that the deposition survey in
this case asked, isn't there a danger that there's
a difference between the people who refused to
participate and those who don't?
MR. HEFTER: Objection.
A: There is a possibility that there is a

2—10.34:57 25—10.36:22 Page 321
Krosnick
difference between those two groups, and the
smaller the group of individuals who are
interviewed, the less impact that difference would
have on the overall results if they had been
interviewed.
Q: And conversely, the larger that
percentage is, the more opportunity there is for
there to be such a difference, right?
A: The more opportunity there is, but as I
say, our literature so far indicates that in all of
the tests done of it, that that does not, in fact,
exacerbate nonrepresentativeness notably.
Q: The fifth of the opinions that you said
that you had been able to develop since February 12
as a result of reviewing materials were that you
were able to develop an opinion — if I am not
stating this, I want you to correct it and state it
in your language — statements made by the tobacco
industry to the American public with more detail
than you were able to previously.
What opinions were you able to express
about statements made by the tobacco industry to
the American public before?
A: It was my opinion at that time that

2—10.36:25 25—10.37:56 Page 322
Krosnick
tobacco companies did not, on a regular basis, make
statements that Americans were exposed to in large
numbers, indicating that the tobacco companies
believed cigarette smoking causes serious health
problems until very recently.
Q: What is the opinion that you have now?
A: I continue to hold that opinion, but I
have now a more detailed basis for, in addition to
that opinion, which is that tobacco companies'
executives or employees made statements on a
regular basis between the 1950s and the 1980s that
were publicized by the national news media
indicating that the scientific evidence on the
health effects of smoking did not document a
connection between smoking and serious health
problems.
Q: This is an opinion that you have
developed since February 12th?
A: As I mentioned, it is in greater detail
now than I had previously.
Q: Your testimony is that at your prior
deposition, you testified that the tobacco industry
made statements to the American people about
smoking and health and that you now have more of

2—10:37:59 25—10:39:06 Page 323
Krosnick
(1) that. Is that right?
(2) A: Yes.
(3) Q: What are the materials upon which you
(4) rely for this opinion that you have reviewed since
(5) February 12th?
(6) A: Newspaper articles and your response to
(7) interrogatories, is that the right term, which
(8) includes a listing of newspaper articles.
(9) REQ. MR. BLEAKLEY: We want the newspaper
(10) articles.
(11) MR. HEFTER: We will get you newspaper
(12) articles.
(13) MR. BLEAKLEY: Once again, we are
(14) going to want to take his deposition again,
(15) we are going to want to reserve the right to
(16) take his deposition again, because this is
(17) new. The fifth new opinion that Dr. Krosnick
(18) has expressed this morning, all of which are
(19) based in whole or in part upon materials
(20) that were provided to him and upon which he
(21) has stated here that he relied in developing
(22) those opinions. We are going to want his
(23) deposition again.
(24) MR. HEFTER: Let's cross that bridge

2—10:39:06 25—10:40:17 Page 324
Krosnick
(1) when we come to it. Let me also state for
(2) the record that you have characterized these
(3) as new opinions. That is your
(4) characterization.
(5) MR. BLEAKLEY: No, that's what I asked
(6) him and that's what he said. I asked him if
(7) he had developed any new opinions, in those
(8) words, and he listed five.
(9) MR. HEFTER: To be clear, I am using opinion in
(10) my terminology, not necessarily legal terminology,
(11) and I am not sure what the legal definition of
(12) opinion is. If you would like me to be more
(13) concrete, to clarify whether, when I say five new
(14) opinions, that conforms to what the legal
(15) definition is, I am delighted to do it.
(16) Q: Is it your testimony that this opinion,
(17) that is, the one that we have just been discussing,
(18) that statements were made by the tobacco industry
(19) to the American public, that these statements were,
(20) in fact, seen and heard by a substantial segment of
(21) the American public?
(22) A: Yes.
(23) Q: What is the basis for that?
(24) A: It is the fact that they were published

2—10:40:16 25—10:41:18 Page 325
Krosnick
(1) in outlets such as The New York Times and The
(2) Washington Post, which are very widely read by
(3) people.
(4) Q: Anything else? Any other basis for
(5) concluding that these were — that these were shown
(6) and seen and heard by a substantial segment of the
(7) American population?
(8) A: No.
(9) Q: Is it your testimony that a substantial
(10) segment of the American population relied upon
(11) these statements by the tobacco industry?
(12) MR. HEFTER: Objection.
(13) A: Can I ask for clarification about what
(14) does relied upon mean?
(15) Q: Do you have an opinion as to whether
(16) they were relied?
(17) A: I am just asking for a clarification of
(18) what does relied mean.
(19) Q: If you can't answer the question, say "I
(20) can't answer the question."
(21) A: I might be able to answer the question
(22) if I understood it completely. I think relied has
(23) a particular legal meaning and I just — I would
(24) like to understand what it is so I can be sure I

3—10:41:20 25—10:43:35 Page 326
Krosnick
(1) can answer.
(2) Q: Does it have a meaning to you other than
(3) a legal meaning?
(4) A: To me, the word "relied on" or the
(5) phrase "relied on" means used in some way, but I
(6) have a feeling that that term has a more specific
(7) legal definition. I just want to be careful.
(8) Q: Do you have an opinion as to whether or
(9) not a substantial segment of the American
(10) population relied upon these statements in these
(11) documents we haven't seen to make decisions about
(12) whether to smoke, continue to smoke or take up
(13) smoking?
(14) MR. HEFTER: Object to the form of the
(15) question.
(16) A: Would you like me to use my own
(17) definition of that term meaning "used in some way"?
(18) Q: Answer it the best way you can.
(19) A: All right. I will use that definition.
(20) Yes, I do have an opinion.
(21) Q: What is that opinion?
(22) A: My opinion is that people who were
(23) exposed to that information most likely were
(24) influenced by it in the process by which they did

2-10:43:40 25-10:45:11

Page 327

Krosznick

- (1) or did not smoke cigarettes.
- (2) Q: What is the basis for that opinion?
- (3) A: The basis for that opinion is, number
- (4) one, as I expressed a moment ago, the likely
- (5) widespread exposure to that information that will
- (6) result from anything prominently published in
- (7) widely circulated national newspapers, and
- (8) secondly, the fact that the ongoing debate in the
- (9) country over that time period about the health
- (10) effects of smoking I think made many people
- (11) attentive to that question and attentive to
- (12) information provided.
- (13) My own research from the SRBI survey
- (14) indicates that statements by tobacco companies are
- (15) influential of people's decisions about smoking and
- (16) that also figures as a basis for that opinion.
- (17) Q: Are you talking about your motivation to
- (18) quit index?
- (19) A: Well, the experiment done with that
- (20) index, yes.
- (21) Q: Anything else?
- (22) A: No.
- (23) Q: Have you done any additional analyses
- (24) since February 12th?
- (25)

2-10:45:16 25-10:46:50

Page 328

Krosznick

- (1) A: Statistical analyses?
- (2) Q: Yes.
- (3) A: Yes, as I have already described.
- (4) The one that you did last night that we
- (5) are going to get during the lunch break?
- (6) A: Yes.
- (7) Q: Any other than that?
- (8) A: The obtaining the data from the national
- (9) health interview survey, which you will also get
- (10) shortly.
- (11) Q: When you say we are going to get, you
- (12) mean we are going to get the national health survey
- (13) and there is some written analysis of that survey
- (14) that you have done since February 12th?
- (15) A: I will give you a printout of the
- (16) statistics generated from those data.
- (17) Q: Anything else?
- (18) A: I computed the reliability of the
- (19) motivation to quit index, which is also in this
- (20) printout I will give you, and the correlations
- (21) between the components of that index.
- (22) I believe that's all.
- (23) Q: And the computation of the reliability
- (24) of the motivation to quit index and the
- (25)

2-10:46:52 25-10:47:57

Page 329

Krosznick

- (1) correlations that you just described will be
- (2) produced in written form?
- (3) A: They will be in this printout that I
- (4) will give you shortly.
- (5) Q: Have you provided any written analyses,
- (6) memoranda, reports to counsel for Empire Blue Cross
- (7) since February 12th?
- (8) A: No.
- (9) Q: Have you been asked to do any additional
- (10) work by Dewey Ballantine before you testify at
- (11) trial?
- (12) A: No.
- (13) Q: Is it your intention to do any
- (14) additional work between now and the time you
- (15) testify?
- (16) A: Yes.
- (17) Q: What work is that?
- (18) A: I plan to read all of the depositions
- (19) taken in the case by that time. I plan to get
- (20) additional information on the relative risk of lung
- (21) cancer due to smoking.
- (22) Q: Why?
- (23) A: To supplement the information that I
- (24) have used already.
- (25)

2-10:47:58 25-10:49:22

Page 330

Krosznick

- (1) Q: What do you mean, to supplement it? Why
- (2) do you need to supplement it?
- (3) A: I would like to reinforce confidence in
- (4) key aspects of materials that I relied on, and
- (5) that's another place in which it would be useful, I
- (6) think, to do that.
- (7) Q: Okay.
- (8) A: I plan to conduct a new analysis of the
- (9) SRBI survey using a new weighting scheme.
- (10) Q: What does that mean?
- (11) A: Well, I mentioned that I did a
- (12) comparison of the demographic characteristics of
- (13) the SRBI survey respondents to the demographic
- (14) characteristics of current and former smokers in
- (15) the national health interview survey. There are
- (16) very small discrepancies between those two samples
- (17) which are consistent with the difference in
- (18) methodology used to collect the data; that is, the
- (19) national health interview survey is a face-to-face
- (20) study, the SRBI is a telephone study. Telephone
- (21) surveys are known to represent certain demographic
- (22) groups slightly less frequently than face-to-face
- (23) surveys do, and so my intention is to replicate all
- (24) of the analyses that I have done with the SRBI data
- (25)

52434 5498

2—10:49:25 25—10:51:00 Page 331
Krosnick
[1] but this time weighting those data so that the
[2] sample has demographic characteristics matching the
[3] national health interview surveys, demographic
[4] characteristics of current and former smokers just
[5] to see whether the results and conclusions drawn
[6] from them alter when doing that.
[7] Q: When are you going to do that?
[8] A: As soon as I have time, which would be
[9] probably within about a week and a half or two
[10] weeks.
[11] Q: Anything else that you plan to do
[12] between now and the time you testify at trial?
[13] A: I plan to continue reading additional
[14] media coverage of statements made about smoking and
[15] health to further bolster that set of issues in my
[16] thinking.
[17] I expect to get information on the
[18] results of surveys telephone calls made to identify
[19] smokers among the Blue Cross-Blue Shield
[20] subscribers. I haven't seen that information yet.
[21] Q: You mean you are going to ask Dewey
[22] Ballantine to give you that?
[23] A: Yes, that's right.
[24] Q: So that you can satisfy yourself that

2—10:51:02 25—10:52:42 Page 332
Krosnick
[1] the nonresponse rate is not a problem?
[2] MR. HEFTER: Objection.
[3] A: No, so as to gather information about
[4] the details of that element of the process.
[5] Q: Just for no particular reason?
[6] MR. HEFTER: Objection.
[7] A: Not for no particular reason, because I
[8] expect that I may be asked to provide information
[9] about that element of the process and I don't have
[10] all of the information yet about that element of
[11] the process.
[12] Q: Anything else you are going to do
[13] between now and the time you testify at trial that
[14] has to do with this case?
[15] A: Thank you.
[16] Not that I can think of.
[17] Q: Would you agree with me that a survey
[18] needs to be designed and conducted properly in
[19] order for it to be valid?
[20] MR. HEFTER: Objection.
[21] A: It's hard for me to answer in a couple
[22] of ways. Number one, we don't really have a set of
[23] guidelines that say, here is what a proper set of
[24] design decisions are and here is a set of improper

2—10:52:45 25—10:53:38 Page 333
Krosnick
[1] design decisions, and then we also have to define
[2] valid in what regard.
[3] Q: Does the term "valid" mean anything to
[4] you in the context of survey research?
[5] A: Yes, it does.
[6] Q: What does it mean?
[7] A: Well, typically, the word "validity" is
[8] used to describe the accuracy with which a measure
[9] reflects the construct that it is designed to
[10] measure.
[11] Q: Would you agree with me that a survey
[12] needs to be designed and conducted properly in
[13] order for it to be valid, as you have just defined
[14] validity?
[15] A: As I defined validity, normally you
[16] wouldn't use validity to refer to a survey. You
[17] would use it to refer to an individual measure
[18] within that survey.
[19] Q: Let's put the question differently,
[20] then.
[21] Would you agree with me that a survey
[22] needs to be designed and conducted properly in
[23] order for it to be one on which people should rely?
[24] MR. HEFTER: Objection.

2—10:53:41 25—10:55:02 Page 334
Krosnick
[1] A: I can neither agree nor disagree. As I
[2] said, we don't have guidelines that say this is
[3] proper and this is improper.
[4] Q: So there is no standard, is that what
[5] you are saying —
[6] MR. HEFTER: Objection.
[7] Q: — for a properly conducted, designed
[8] and conducted survey?
[9] A: Yes, there is no list of characteristics
[10] that a survey must have to be called proper, that
[11] is correct.
[12] Q: Survey research is a science, isn't it?
[13] A: Yes, it is.
[14] Q: And there are lots of bad surveys out
[15] there, aren't there?
[16] A: I think we would have to clarify bad in
[17] what way. Some people might say bad in terms of
[18] they don't like the results, others would say bad
[19] in terms of other aspects of them, so I would have
[20] to clarify with you what you mean there.
[21] Q: When you said there is no standard, do
[22] you mean that the survey research literature does
[23] not talk about potential errors and mistakes in
[24] conducting and designing surveys?

2—10:55:05 25—10:56:42 Page 335
Krosnick
(1) A: The literature does talk about potential
(2) errors and mistakes.
(3) Q: In fact, you, yourself, have written
(4) extensively on the subject, haven't you?
(5) A: Yes.
(6) Q: Are there ways to check or to verify or
(7) to ensure that a survey is done, whatever term you
(8) want to use, properly, correctly, in the best way
(9) possible?
(10) A: Now we can — now I can grab on to that,
(11) in the best way possible.
(12) Are there ways to determine that? Yes,
(13) there are.
(14) Q: What are they?
(15) A: It's a long list. The first set of
(16) considerations would involve sampling that one
(17) would want to begin with a specified population and
(18) one would want to draw a sample from that in a
(19) systematic way whereby every element of the
(20) population has a known non-zero probability of
(21) selection. One would want to make extensive
(22) efforts to gather data from as many selected sample
(23) elements as possible. One would want to design a
(24) questionnaire using formats and wordings that

2—10:56:48 25—10:58:07 Page 336
Krosnick
(1) minimized the likelihood of bias and maximize the
(2) ease with which respondents can accurately report
(3) the information of interest. One would want to be
(4) meticulous in recording, transforming and analyzing
(5) those data so as not to introduce any additional
(6) accidental mistakes.
(7) I think that's a pretty good list to
(8) start with. I am sure there are more.
(9) Q: Suppose you are designing a survey. Are
(10) there ways to, after you have designed a survey, to
(11) ascertain whether or not it's a good survey or is
(12) likely to be a good survey?
(13) MR. HEFTER: Objection.
(14) A: I am having trouble with what a good
(15) survey is, but —
(16) Q: Do you do bad surveys?
(17) A: I just have trouble describing surveys
(18) as good or bad. Surveys have features to them, and
(19) those features enhance or decrease the likelihood
(20) that the data obtained can be confidently used for
(21) certain types of inferences or judgments.
(22) Q: Well, let's use that definition.
(23) MR. BLEAKLEY: May I have that back,
(24) please.

2—10:58:27 25—10:59:31 Page 337
Krosnick
(1) (Record read.)
(2) Q: Suppose your goal is to enhance the
(3) possibility that the survey data can be used to
(4) make inferences, okay? What can you do when
(5) designing and conducting a survey, to enhance those
(6) possibilities?
(7) A: Well, it would depend completely on what
(8) inferences one would want to make.
(9) Q: Once you have designed such a survey, is
(10) there a process in the survey world for having it
(11) checked by, to see whether or not it is most likely
(12) to produce that kind of result?
(13) A: What kind of result?
(14) Q: One that enhances the possibilities that
(15) you can draw the inferences from it.
(16) A: Draw which inferences?
(17) Q: Whatever inferences, any inferences.
(18) A: Any inferences, okay.
(19) Q: You don't do survey research just for
(20) the heck of it, do you?
(21) A: Typically, you do it with the goal of
(22) making certain types of inferences, yes.
(23) Q: Let's, with the goal of making certain
(24) types of inferences, let's try to use that as the

2—10:59:35 25—11:00:38 Page 338
Krosnick
(1) definition here of a good survey.
(2) MR. HEFTER: Objection.
(3) A: I think we are going down a path which
(4) is going to confuse us later.
(5) For example, you might have one of two
(6) different goals in doing a survey. One would be —
(7) I will just use an arbitrary example here — to
(8) measure which presidential candidate the majority
(9) of Americans prefer to be elected president in the
(10) next election. You might also want to do a survey,
(11) in order to predict or forecast which candidate
(12) will win that election.
(13) Those are two different inferences that
(14) you might want to make, and the way you would
(15) design a survey to achieve those two inferences
(16) would be very different in those two cases. To
(17) implement it in the way to optimize the likelihood
(18) of making the first inference would actually hurt
(19) your ability to make the second inference, and vice
(20) versa. So whenever we talk about features of a
(21) survey that enhance the likelihood of making
(22) inferences and what designs would you want to see
(23) in a survey, you have to be sort of specific about
(24) what those inferences would be.

2—11:00:41 25—11:02:19 Page 339
Krosnick
(1) Q: Fair enough.
(2) What was the goal of the SRBI survey?
(3) A: Well there, were a number of goals of
(4) the SRBI survey. One goal was to measure people's
(5) perceptions of the relative risk of smoking and
(6) causing lung cancer. A second goal of that survey
(7) was to measure the impact that hearing statements
(8) about the relation of smoking to health by tobacco
(9) company employees has on current and former
(10) smokers' regret about smoking and desire to quit
(11) smoking.
(12) I would say those were the principal
(13) goals.
(14) Q: Were there subsidiary goals?
(15) A: No.
(16) Q: So there were two goals. One was to
(17) measure the perception of the relative risk of
(18) smoking by the survey respondents by the
(19) population of survey respondents and secondly is
(20) to measure the impact on those survey respondents
(21) of statements about smoking and health?
(22) A: Yes.
(23) Q: Now, in designing that kind of survey,
(24) in the scientific literature there is a process

2—11:05:22 25—11:05:49 Page 340
Krosnick
(1) called peer review. You know what that is, right?
(2) A: Yes.
(3) Q: Is there something akin to peer review
(4) in doing surveys?
(5) A: Peer review is the process whereby
(6) materials generated by a researcher are shared with
(7) others deemed to be competent in the field who
(8) offer opinions and suggestions. That is done
(9) sometimes in survey research, yes.
(10) Q: Was your SRBI survey peer reviewed?
(11) A: It has not been subjected to peer
(12) review.
(13) Q: Was the deposition survey peer reviewed?
(14) A: Actually, I should back off. I don't
(15) know whether the SRBI study was peer reviewed or
(16) not, nor do I know whether the deposition survey
(17) was peer reviewed or not.
(18) Q: You don't know whether your own survey
(19) was peer reviewed?
(20) A: I am not aware of any instances in which
(21) that occurred, but that may have occurred without
(22) my knowledge.
(23) Q: Let me go back to the question I asked
(24) before, which is the peer review process occurs

2—11:03:53 25—11:05:15 Page 341
Krosnick
(1) afterwards. What about before?
(2) Someone is designing a survey and it's a
(3) survey the goal of which is to measure people's
(4) perception of relative risk and measure the impact
(5) of statements about smoking and health. Is there a
(6) way, a process, a convention in survey research for
(7) finding out whether or not that survey, as
(8) designed, makes sense?
(9) A: Yes.
(10) Q: What is it, and tell us how you go about
(11) it.
(12) A: The design of this particular survey is
(13) not particularly innovative. It is based upon —
(14) pretty much all of the steps involved in it are
(15) based upon procedures that have been implemented in
(16) the past in high quality social science research
(17) and have been peer reviewed and endorsed by that
(18) process, and so the sampling procedure, the
(19) interviewing procedure, the questionnaire design
(20) procedure, the data processing procedure, the data
(21) analysis procedure, everything that was done to
(22) generate those data conform to the — to practices
(23) that have been endorsed by our fields previously.
(24) Q: You are talking about the SRBI survey

2—11:05:17 25—11:06:20 Page 342
Krosnick
(1) now?
(2) A: Yes, I am.
(3) Q: Not the deposition survey?
(4) A: That's correct.
(5) Q: That wasn't done with the deposition
(6) survey, was it?
(7) A: What wasn't done?
(8) Q: You wouldn't say that the deposition
(9) survey was done in accordance with established
(10) procedures used in your field for decades, would
(11) you?
(12) MR. HEFTER: Objection.
(13) A: The sampling procedure and respondent
(14) selection procedure, to the extent that I know
(15) about it, was done conforming to conventions in our
(16) field. The analysis of the data was done according
(17) to well-established conventions in the field. The
(18) process of interviewing is not typically done in
(19) surveys.
(20) Q: Is there something called consistency
(21) checks that you can do in connection with the
(22) development of a survey?
(23) A: The term "consistency checks" is
(24) sometimes used to refer to for the following idea.

2-11:06:22 25-11:07:52

Page 343

Krosnick

(1) If you ask people — if you ask a single person
(2) more than one question during the course of an
(3) interview or multiple interviews where there is a
(4) logical relationship one would expect between
(5) answers, one can check the extent to which those
(6) answers are, in fact, consistent with one another.
(7) So to illustrate, if I were to interview you today
(8) and ask you how old you are and then I interviewed
(9) you again exactly one year from now and I asked you
(10) how old you are then, there is a logical basis for
(11) inferring that you would be exactly one year older
(12) at that later time point, and so a consistency
(13) check would be to confirm that you did, in fact,
(14) say a number that was one digit greater than what
(15) you said today.

(16) Q: Were there consistency checks conducted
(17) in connection with the SRBI survey?

(18) MR. HEFTER: Using his definition of
(19) what a consistency check is?

(20) MR. BLEAKLEY: Yes.

(21) A: Yes.

(22) Q: Who did them?

(23) A: I did.

(24) Q: Tell us about them.

2-11:08:01 25-11:08:35

Page 344

Krosnick

(1) A: These are not quite the same factual
(2) matters as in the example I just described, where
(3) if you are accurately reporting your age today and
(4) I know it's been one year between the two
(5) interviews, then I can confidently say what your
(6) answer ought to be at the later interview.

(7) These are cases in which questions asked
(8) in the SRBI survey are logically related to one
(9) another. They don't demand perfect consistency in
(10) the way that the age example does, but if the data
(11) are being collected in the way that I asked for
(12) them to be collected, then one would expect to see
(13) consistency of answers, and there are two ways in
(14) which I look for consistency in these data.

(15) One is that there are two questions that
(16) get at whether respondents believed that cigarette
(17) smoking causes lung cancer, one was the
(18) comparatives of relative risk, and the other was a
(19) follow-up question asking directly to respondents,
(20) do you believe that smoking cigarettes increases a
(21) person's chances to getting lung cancer, and so if
(22) people reported a higher incidence of lung cancer
(23) among smokers than among nonsmokers, one would
(24) expect that respondent to also say they believed

2-11:09:41 25-11:11:09

Page 345

Krosnick

(1) smoking increases the likelihood of lung cancer,
(2) and so I observed the consistency between answers
(3) to those sets of questions, you might say.

(4) In addition, I looked at the consistency
(5) to answers to the questions that were used to build
(6) the motivation to quit index. There again, each of
(7) those individual questions could yield answers that
(8) are not literally matching some other particular
(9) answer and be reasonable and accurate in their
(10) assessments, but we would expect overall people who
(11) express being more unhappy about smoking would also
(12) be more likely to say they want to quit. People
(13) who say they are more interested in quitting would
(14) also say they are more likely to try to quit and so
(15) on. So I look for consistency to answers among
(16) those questions and observed consistency there as
(17) well.

(18) Q: What do you do if you find that
(19) respondents' answers are not consistent when you
(20) conduct one of these consistency checks?

(21) A: Well, again, it would depend upon which
(22) of the two consistency checks you are doing. Let's
(23) start with the age example. If you have a factual
(24) matter where you have told me today you are 52 and

2-11:11:12 25-11:12:33

Page 346

Krosnick

(1) then in a year you tell me you are 54, one of two
(2) possibilities is raised there; either you made a
(3) mistake in what you said on one of those two
(4) occasions, or the process by which your answer was
(5) recorded and transformed introduced that error that
(6) hadn't been there in your statements, and so I
(7) would investigate, if there were a large number of
(8) such discrepancies, what might have produced it by
(9) looking at whatever records there would be and try
(10) to determine what the actual values are.

(11) In the case of the —

(12) Q: I suppose there is a third possibility:
(13) I lied.

(14) A: Well, I thought that was included in my
(15) earlier one, that you misstated it for whatever
(16) reason. You can misstate it for a variety of
(17) reasons. I meant to include that in my earlier
(18) example.

(19) Q: Okay.

(20) A: In the case of the sorts of consistency
(21) checks I mentioned are possible with the SRBI data,
(22) seeing high consistency there is reassuring to an
(23) analyst in assessing whether the data were
(24) collected according to the instructions that were

2—11:12:38 25—11:13:38 Page 347
Krosnick
[1] designed.
[2] If I had seen no consistency at all or
[3] very dramatic discrepancies, I would have raised
[4] questions and I would have asked, Gee, this doesn't
[5] seem possible to me that respondents could be this
[6] inconsistent in answering two questions on related
[7] topics, and then I would ask to reconstruct as much
[8] of a record as could be reconstructed of the
[9] process by which the data were collected and
[10] analyzed.
[11] Q: Would it be the case, if there was
[12] enough inconsistency between answers, that the
[13] survey would be one from which you would not be
[14] able to draw any inferences?
[15] MR. HEFTER: Objection.
[16] A: I am sorry, could I hear that one more
[17] time?
[18] Q: The definition we have adopted here, I
[19] thought, was that the data permit you to draw
[20] inferences, right? If there is enough
[21] inconsistency between the answers to questions,
[22] does that affect the ability to draw inferences
[23] from the survey?
[24] MR. HEFTER: Same objection.

2—11:13:39 25—11:14:47 Page 348
Krosnick
[1] A: I don't know what "enough" is, but I
[2] guess I would say, even not knowing for sure what
[3] enough is, no.
[4] Q: Would you, if there were enough
[5] inconsistent answers, would you exclude them from
[6] the results of your survey?
[7] MR. HEFTER: Objection.
[8] A: Again, I am not sure what enough is, but
[9] I would personally never exclude responses from a
[10] survey, unless I had a strong basis for believing that
[11] a mistake was made in the collection or recording
[12] of the data.
[13] Q: Is there a thing called convergent
[14] validity?
[15] A: Yes.
[16] Q: What does that mean?
[17] A: When convergent validity is, in a
[18] sense, what we were talking about. That is a
[19] standard for assessing the extent to which two
[20] different ways of measuring something yield the
[21] same result. In other words, do these two results
[22] converge with one another, and to the extent that
[23] they do converge with one another, then one has a
[24] stronger basis for inferring that the assessment of

2—11:14:52 25—11:16:09 Page 349
Krosnick
[1] this phenomenon, whatever it is, has been done
[2] validly.
[3] Q: What if they don't converge with one
[4] another?
[5] MR. HEFTER: Objection.
[6] A: Well, convergence is always a continuum
[7] in our field, we are always estimating statistics
[8] that describe the extent to which two measures
[9] converge with one another, and so if you have a
[10] strong theoretical basis for expecting the two
[11] measures will converge and to use, I think, what is
[12] the implication of your question, you find a zero
[13] association between these, they simply do not
[14] converge with one another, then one must — that,
[15] again raises questions worthy of investigation, and
[16] so then one must decide which of these two results
[17] would one have the most confidence in.
[18] In my experience, generally speaking,
[19] when you expect to see convergent validity, you do
[20] see convergent validity — excuse me, when you
[21] expect to see relatively high convergent validity,
[22] you do see relatively high, and when you find
[23] divergence among what things you think should
[24] diverge, again, a careful examination of the

2—11:16:12 25—11:17:43 Page 350
Krosnick
[1] procedures by which those results were generated
[2] allows one to reach the conclusion you can have
[3] more confidence in one of them than the other.
[4] Q: Were there any consistency checks
[5] conducted by you or anyone else, to your knowledge,
[6] in the deposition survey?
[7] MR. HEFTER: Using his definition of a
[8] consistency check?
[9] MR. BLEAKLEY: Yes.
[10] A: No, not that I know of.
[11] Q: Was there any check for convergent
[12] validity conducted, to your knowledge, in
[13] connection with the deposition survey?
[14] A: Yes.
[15] Q: Please tell us how and by whom.
[16] A: In my initial written report in this
[17] case, I described the results of coding of 156
[18] depositions taken of Empire Blue Cross-Blue Shield
[19] subscribers who were ever smokers. My analysis
[20] yielded a series of frequency distributions,
[21] percentages of people who were coded into various
[22] categories. In my supplemental report, results are
[23] provided on coding of additional depositions from
[24] Empire Blue Cross-Blue Shield and other Blue

2-11:17:47 25-11:19:17

Page 351

Krosnick

(1) Cross-Blue Shield or Blue Cross plans, and
(2) convergent validity is — an assessment of
(3) convergent validity is afforded by comparison of
(4) the analyses in the first report to the
(5) supplemental report.

(6) Q: You mean, because there are both Empire
(7) and non-Empire Blue Cross subscribers, is that what
(8) permitted you to make a check for convergent
(9) validity?

(10) A: No, not particularly.

(11) Q: I don't understand what your
(12) supplemental report did that results in a — that
(13) consists of a convergent validity check. You will
(14) have to explain it again for me.

(15) A: Okay. I do not have a strong
(16) theoretical basis for expecting Empire Blue
(17) Cross-Blue Shield ever smoker subscribers to differ
(18) in terms of the key variables of interest in my
(19) research here from individuals who were ever
(20) smokers but were not subscribers to Empire or claim
(21) filers.

(22) I think the processes that I am studying
(23) here are likely to be quite general in the American
(24) population, and so therefore, looking at the

2-11:19:20 25-11:20:27

Page 352

Krosnick

(1) convergence between the Empire 156 coding described
(2) in my first report and the coding results for the
(3) other Empire and non-Empire individuals all
(4) collapsed together as described in my supplemental
(5) report is a basis of saying if you do two analyses
(6) in a similar way with two different groups of
(7) people, do you reach approximately the same
(8) conclusions. That would be an assessment of
(9) convergent validity, and so in that case, because
(10) of the results of those two sets of codings were
(11) quite similar to one another, that gave me
(12) significant confidence in convergent validity, and
(13) therefore, validity more generally of those
(14) results.

(15) Q: Earlier this morning, when I was asking
(16) you about some of the potential problems with the
(17) survey, you used the word "bias." Do you remember
(18) that?

(19) MR. HEFTER: Objection.

(20) A: Not particularly, but, okay, I will
(21) accept that I did.

(22) Q: Is it a problem with surveys, a
(23) potential problem, bias?

(24) A: Yes, it is a potential problem, yes.

2-11:20:29 25-11:22:01

Page 353

Krosnick

(1) Q: Would you explain to us how bias is a
(2) potential problem in survey research?

(3) A: Well, there are many ways in which bias
(4) can be a potential problem.

(5) For example, if a data collection
(6) procedure is biased toward getting information from
(7) some types of people and not other types of people,
(8) that can distort the generalizability of the
(9) results. If a particular question is worded in a
(10) way that encourages some types of answers and
(11) discourages other types of answers, that would also
(12) be another sort of bias.

(13) Q: Any other ways?

(14) A: Well, in the case of the deposition
(15) analysis that I did, there can be bias in coding of
(16) questions. If an investigator hopes to obtain a
(17) particular result and does the coding him or
(18) herself, his or her hopes or desires can affect the
(19) decision, and that could be the result of a bias.

(20) Q: Is there a potential for bias when the
(21) person conducting a survey is an advocate of a
(22) particular issue or position?

(23) A: There is a potential for bias just as,
(24) along the lines I just spoke of. In other words,

2-11:22:04 25-11:23:26

Page 354

Krosnick

(1) each of the procedural decisions that a researcher
(2) makes can either introduce or minimize the
(3) likelihood of bias.

(4) Q: For example, if a survey is conducted
(5) purely for purposes of litigation, doesn't that
(6) present an opportunity for bias?

(7) MR. HEFTER: Objection.

(8) A: It doesn't provide an opportunity for
(9) any more bias than any other setting.

(10) Q: Do you think that when a survey is
(11) conducted by an advocate of a particular position
(12) for purpose of litigation on that position, that it
(13) is especially important for that survey to adhere
(14) to some of the standards that have been enunciated
(15) in the literature?

(16) MR. HEFTER: Objection.

(17) A: I think it is always important for all
(18) surveys to conform to those standards.

(19) Q: How do you avoid bias or keep it to a
(20) minimum in survey research?

(21) A: Well, each potential type of bias calls
(22) for steps that can be taken to minimize it, and so,
(23) for example, I began by talking about sampling bias
(24) and in order to minimize the likelihood of sampling

2--11:23:29 25--11:25:00 Page 355
Krosnick
(1) bias, one uses one of the established or
(2) defensible, representative sampling procedures, and
(3) one implements the data collection according to
(4) principles that minimize the likelihood that
(5) certain respondents will be interviewed over
(6) others. In designing questionnaires, one seeks to
(7) follow principles that minimize the likelihood that
(8) respondents are pushed toward giving certain types
(9) of answers as opposed to others. In doing coding,
(10) one sees to it that the coders are blind and don't
(11) know what any expectations or hopes are of any
(12) results that will come out of the study and so on.
(13) Q: We talked about this a little bit
(14) earlier this morning, but isn't the nonresponse
(15) issue that we previously discussed isn't that
(16) referred to in the literature as the nonresponse
(17) bias?
(18) A: In the literature, it would be very rare
(19) to find, if ever, a phrase "the nonresponse bias."
(20) The phrase "nonresponse bias" itself shows up
(21) regularly in the literature and nonresponse bias is
(22) an issue of great interest to survey researchers.
(23) Q: Why?
(24) A: Because it's a source of bias, and our

2--11:25:02 25--11:26:00 Page 356
Krosnick
(1) goal is always to minimize.
(2) Q: How is it a source of bias?
(3) A: Well, by definition, it is a bias. Its
(4) name is a bias, and therefore --
(5) Q: How does it affect the validity of
(6) survey research?
(7) MR. HEFTER: Objection.
(8) A: If there is nonresponse bias, then by
(9) definition it is bias. In other words,
(10) nonresponse bias is the instance in which people
(11) who are interviewed for a survey are systematically
(12) different from people who are not interviewed for
(13) that survey but selected to be interviewed in ways
(14) that yield different results for the survey than
(15) would have occurred if those not interviewed
(16) individuals had been interviewed, and so if such
(17) bias is present, then that's a bias.
(18) MR. HEFTER: Peter, we have been going
(19) for close to an hour and 45 minutes. We
(20) would like to take a break, if it is
(21) convenient.
(22) THE VIDEOGRAPHER: The time is 11:21
(23) a.m. This completes tape number 1 of the
(24) videotaped deposition of Jon Krosnick.

3--11:30:01 25--11:41:41 Page 357
Krosnick
(1) (Recess taken.)
(2) THE VIDEOGRAPHER: The time is 11:41
(3) a.m. This is tape number 2 of the
(4) videotaped deposition of Mr. Jon Krosnick.
(5) BY MR. BLEAKLEY:
(6) Q: Does nonresponse bias present a special
(7) or peculiar problem in connection with telephone
(8) surveys?
(9) A: No.
(10) Q: No difference between telephone surveys
(11) and any other kind of survey insofar as nonresponse
(12) bias is concerned; is that your opinion?
(13) A: My opinion is that nonresponse bias, if
(14) it occurs, is a problem equally for all kinds of
(15) surveys, yes.
(16) Q: We discussed this a little earlier this
(17) morning, and you talked about current literature.
(18) Can you tell us what current literature you are
(19) talking about that suggests that nonresponse bias
(20) is not a problem?
(21) A: Yeah. Well, there are at least two key
(22) studies. One is, as I mentioned earlier, a paper
(23) in the new issue of Public Opinion Quarterly. The
(24) authors of Eleanor Singer, Stanley Presser and

2--11:41:45 25--11:43:25 Page 358
Krosnick
(1) Richard Curtin, and this is a study that uses
(2) decades' worth of University of Michigan survey
(3) research center telephone interviews to look at the
(4) impact of nonresponse bias associated with low
(5) response rates and finds essentially none.
(6) The second key paper was published in
(7) the last couple of years, a research study that
(8) Scott Keeter is one of the authors of the
(9) publication, if not the only author, K-e-e-t-e-r,
(10) and this was a study funded by Pew Foundation,
(11) P-e-w, and it similarly compared higher response
(12) rate telephone surveys to lower response rate
(13) telephone surveys and found no sizable bias to
(14) result.
(15) Q: Are you familiar, can you identify for
(16) us any literature other than these two pieces that
(17) conclude that nonresponse bias is not a problem?
(18) A: Not a problem ever?
(19) Q: Why do you put the -- why did you ask me
(20) that way, nonresponse ever?
(21) A: I --
(22) Q: Are you suggesting that there are, even
(23) with these two articles you have talked about, some
(24) instances in which nonresponse bias can be a

2—11:43:28 25—11:44:35

Page 359

Krosnick

(1) problem?
 (2) A: Well, I guess we are getting a little
 (3) mixed up on terminology here. If nonresponse bias
 (4) happens, that's a problem. The studies I mentioned
 (5) are studies that evaluated the extent to which
 (6) lower response rates enhance nonresponse bias, and
 (7) the answer from those studies is that they do not
 (8) do so. So, I am sorry, maybe I answered the wrong
 (9) question.

(10) Q: Do you have any other literature that
 (11) you can identify for us besides those two articles?

(12) MR. HEFTER: Are you asking for the same
 (13) proposition?

(14) A: Which proposition?

(15) Q: That the lower response rate is not a
 (16) problem.

(17) MR. HEFTER: Objection.

(18) A: Well, I didn't say that. What I said
 (19) was that the — these particular studies showed
 (20) that substantially reduced response rates does not
 (21) enhance nonresponse bias. There are other studies,
 (22) one of which I mentioned earlier, where in a paper
 (23) that I published with other authors in Public
 (24) Opinion Quarterly a few years ago, maybe 1997, that

2—11:44:40 25—11:45:11

Page 360

Krosnick

(1) we compared surveys with relatively low response
 (2) rates to surveys with relatively high response
 (3) rates and found more accuracy in the lower response
 (4) rate surveys than the higher response rate surveys.

(5) There are many studies that have been
 (6) done comparing, in terms of demographics now, which
 (7) is shifting gears for me, because I have been
 (8) talking about substantive issues, behaviors and
 (9) attitudes, if you shift over to measuring
 (10) demographics, many studies have shown that even
 (11) surveys with relatively high response rates do
 (12) systematically underrepresent some segments of the
 (13) population. That would be called nonresponse bias,
 (14) although it is typically very small when the
 (15) surveys are done well, and that nonresponse bias is
 (16) a basis for statistical weighting adjustments that
 (17) are sometimes done to compensate. Those weighting
 (18) adjustments also have been shown typically to
 (19) produce very small or no differences in the results
 (20) of survey investigations, which is additional
 (21) evidence that that relatively small rate of
 (22) nonresponse bias does not distort conclusions about
 (23) substantive matters drawn from those surveys.

(24) Q: Are you familiar with the term

2—11:46:14 25—11:48:18

Page 361

Krosnick

(1) "ineligibles," as it is used in connection with
 (2) response rates and survey research?

(3) A: Yes.

(4) Q: What does it mean?

(5) A: If a survey design specifies that
 (6) individuals from a particular population should
 (7) provide data, and the process of interviewing
 (8) potential respondents leads to some interviews
 (9) being conducted with people who do not meet those
 (10) criteria, then those people would be identified as
 (11) ineligible, so, for example, if you wished to
 (12) conduct a survey of a representative sample of
 (13) American adult residents age 18 or older and you do
 (14) so by telephoning American households, and find
 (15) that a potential respondent actually is not a U.S.
 (16) resident, then that person would be deemed
 (17) ineligible.

(18) Q: Does a good survey provide a description
 (19) of the number of ineligible?

(20) MR. HEFTER: Objection.

(21) A: Well, a survey wouldn't provide a
 (22) description of anything. You could have a report
 (23) on a survey and ideally — it depends on who the
 (24) report is written for. Some contexts call for more

2—11:48:24 25—11:49:50

Page 362

Krosnick

(1) detail than others, but in contexts where people
 (2) are most interested in all of the details possible
 (3) on a particular survey, it would be useful to
 (4) describe that percentage, yes.

(5) Q: Did you report the number of ineligible
 (6) in connection with your telephone survey?

(7) A: Yes, we did.

(8) Q: Do we know the number of ineligible in
 (9) connection with the deposition survey?

(10) A: I have, in the e-mail that I received
 (11) last night and will get to you very shortly, seen
 (12) numbers that indicate something about ineligible,
 (13) yes.

(14) I am sorry, did I answer your question?

(15) What was the question again?

(16) Q: You answered it.

(17) A: Okay.

(18) Q: When you calculate the response rate, is
 (19) it proper or appropriate to include the number of
 (20) ineligible?

(21) MR. HEFTER: Objection.

(22) A: It depends on why individuals are
 (23) ineligible, so, for example, in the SRBI survey, in
 (24) calculating the response rate, one would want to

2—11:49:54 25—11:51:10 Page 363
Krosnick
[1] take into account all individuals who were
[2] interviewed fully, according to the questionnaire,
[3] including both current smokers, former smokers, and
[4] never smokers.
[5] One, might, in a sort of colloquial way,
[6] consider the nonsmokers to have been ineligible for
[7] that survey, but that is not the case. They were,
[8] in fact, asked questions in that survey, and
[9] therefore, belong as a part of the calculation.
[10] On the other hand, if you were doing a
[11] survey of American households seeking American
[12] residents and your telephone called you to a
[13] household that included no American residents, then
[14] you would not incorporate that calculation — that
[15] number of ineligible in your calculation of the
[16] response rate.
[17] Q: You calculated the response rate for
[18] your telephone survey at 51.9 percent, right?
[19] A: No.
[20] Q: What did you calculate it as?
[21] A: The 51 percent in the report was
[22] calculated by SRBI, not by me.
[23] Q: The response rate in your telephone
[24] survey was calculated to be 51.9 percent by SRBI.

2—11:51:16 25—11:52:00 Page 364
Krosnick
[1] correct?
[2] A: I am sorry, just — I want to make sure
[3] I answer this right. Can you say that one more
[4] time?
[5] Q: Is it your testimony that SRBI
[6] calculated the response rate for your telephone
[7] survey?
[8] A: SRBI calculated a response rate. I just
[9] want to be clear about that.
[10] Q: The response rate they calculated was
[11] 51.9 percent?
[12] A: That's correct.
[13] Q: Did you calculate one separately?
[14] A: Yes, I have.
[15] Q: What was it?
[16] A: About 57.5 percent.
[17] Q: Were ineligible included in that
[18] calculation?
[19] A: Again, we just need to be clear about
[20] ineligible why. Ineligible in the sense that they
[21] are never smokers, yes, they were included in that
[22] calculation. I would not call them ineligible in
[23] the technical sense of that term. One could
[24] imagine calling them ineligible colloquially, but

2—11:52:07 25—11:53:28 Page 365
Krosnick
[1] that would not be a proper use of the term.
[2] Q: Why not?
[3] A: Because they were eligible to be
[4] interviewed and they were interviewed. They did
[5] answer questions.
[6] Q: If the ineligible, consisting of never
[7] smokers, had been excluded from the calculation
[8] made by SRBI and by you of your response rate, what
[9] would it have been?
[10] MR. HEFTER: Can I hear that back again,
[11] please?
[12] (Record read.)
[13] MR. HEFTER: Objection.
[14] A: Okay. First of all, I wouldn't call the
[15] never smokers ineligible. Second of all, if those
[16] people were omitted, then you would not end up with
[17] a response rate.
[18] Q: If you had not included them, all the
[19] never smokers — put aside for the moment of
[20] whether they were or were not truly ineligible —
[21] if you had not included them, the response rate
[22] would have been significantly lower than 51
[23] percent, wouldn't it?
[24] A: No.

2—11:53:33 25—11:54:42 Page 366
Krosnick
[1] Q: Why not?
[2] A: Because there are a number of different
[3] ways that you can calculate a response rate, and
[4] none of them would match a procedure that would
[5] exclude those people, so, in other words, you could
[6] compute a percentage, but that percentage could not
[7] be called a response rate.
[8] Q: But it would be lower than 50 percent,
[9] whatever you called it, wouldn't it?
[10] A: Yes, you could — yes.
[11] Q: Would you explain for us how it is that
[12] non, never smokers are eligible, but you describe
[13] them in your expert report as not qualified?
[14] A: First of all, I didn't describe them as
[15] not qualified. That's in the appendix provided by
[16] SRBI, they are labeled that way, and secondly, what
[17] they meant by not qualified is simply that the
[18] filter questions that asked have you ever smoked
[19] cigarettes regularly led these people to give
[20] answers that indicated they did not need to proceed
[21] with the survey any further, that, in other words,
[22] they had completed the survey fully at that point
[23] for them.
[24] Q: At that point, when they had completed

2—11:54:43 25—11:56:42

Page 367

Krosnick

(1) the survey fully, did the never smokers answer any
(2) of the questions that formed the basis for the two
(3) opinions, the two goals of your survey?

(4) A: No, they had not.

(5) Q: I believe we talked on February 12th and
(6) also earlier this morning about randomness, right?

(7) A: I don't remember it this morning, but,
(8) okay.

(9) Q: You would agree with me, would you not,
(10) that randomness is a key element of a good survey?

(11) A: Sometimes procedures that involve
(12) generating random numbers are useful, yes.

(13) MR. BLEAKLEY: May I have that answer
(14) read back, please.

(15) (Record read.)

(16) Q: And there are times when randomness is
(17) not useful?

(18) A: Yes, there are times when randomness is
(19) not useful.

(20) Q: Explain for us what kind of survey would
(21) be useful to have a survey that was not random?
(22) Give us a couple of examples.

(23) A: I am trying to decide which of the
(24) various examples would be useful.

2—11:56:45 25—11:56:00

Page 368

Krosnick

(1) I think, if I understand your question,
(2) you are referring to randomness in the sampling
(3) process, and randomness in the sampling process
(4) might be compromised when one implements relatively
(5) complex sampling procedures, like stratified
(6) sampling, for example, where there are elements of
(7) randomness in the process but there are elements of
(8) randomness, as well.

(9) Similarly, you can use random variable
(10) generation in designing questions. At times,
(11) but often we don't do that. We ask all respondents
(12) the same questions instead of randomly assigning
(13) respondents to answer only some questions.

(14) Was that helpful?

(15) Q: Did you randomly select the sample in
(16) your telephone survey?

(17) A: I personally did not select the sample
(18) at all.

(19) Q: Did SRBI randomly select the sample that
(20) was used in your telephone survey?

(21) A: SRBI did not select the sample at all.

(22) Q: Was the sample used in your telephone
(23) survey randomly selected?

(24) A: It was randomly generated, not randomly

2—11:58:05 25—11:59:13

Page 369

Krosnick

(1) selected.

(2) Q: Was the sample selected or generated in
(3) connection with the deposition survey random?

(4) A: Yes.

(5) Q: How do you know?

(6) A: I think, as I described in my last
(7) deposition, I had a lengthy telephone conversation
(8) with individuals from the firm that selected the
(9) sample from the population listing and heard a
(10) description of the procedure by which that was done
(11) and asked some clarifying questions and concluded
(12) that I understood how the process was done and that
(13) it involved a random sampling procedure.

(14) Q: Were the nonsmokers interviewed by
(15) Audits & Surveys in connection with the deposition
(16) survey, were they eligibles or ineligibles?

(17) MR. HEFTER: Objection.

(18) A: You have to say eligible for what.

(19) Q: Were they ineligibles?

(20) MR. HEFTER: Objection.

(21) A: You don't want to say eligible for what?

(22) Q: Answer the question the best you can.

(23) MR. HEFTER: Are you using his
(24) definition of eligible or the colloquial

2—11:59:16 25—12:01:11

Page 370

Krosnick

(1) definition? That's what I am getting hung
(2) up on.

(3) Q: Answer the question as best you can.

(4) MR. HEFTER: Read back the question,
(5) please.

(6) (Record read.)

(7) A: I guess there are two answers, yes and
(8) no. They were eligible from the point of view of
(9) what I believe to be the survey that Audits &
(10) Surveys conducted, although I don't yet have
(11) complete details on how that was done. As far as
(12) whether they were qualified to be deposed in this
(13) case, the answer is no.

(14) Q: What is statistical significance, as
(15) that term is used in connection with survey
(16) research?

(17) A: Statistical significance is a feature of
(18) a statistical relationship between two variables.
(19) It can be used to describe differences between
(20) groups of people, for example, or it can be used to
(21) describe a relationship between two variables, and
(22) it assesses the extent to which an observed
(23) difference or relationship could have occurred by
(24) chance alone versus the likelihood that it did not

2—12:01:14 25—12:02:30 Page 371
Krosnick
[1] occur by chance alone and is, instead, attributable
[2] to some systematic pattern or force.
[3] Q: What is its relevance to survey
[4] research?
[5] A: Well, it's relevant in a couple of ways.
[6] One is that statistical significance is used as a
[7] criterion for evaluating relationships observed
[8] between variables, because we often do that in
[9] surveys. For example, we might be interested in
[10] whether people's political party identification is
[11] related to their vote choice in elections, and so
[12] we would compute a correlation between party
[13] identification and vote choice, subjected that
[14] relationship to a test of statistical significance
[15] to assess the probability that the observed
[16] relationship happened just by chance alone or is
[17] really due to the fact that in the population these
[18] two variables do tend to co-vary with one another.
[19] In this case, perhaps the more you identify with
[20] the Republican Party, the more likely you are to
[21] vote for Republican candidates. That is one way in
[22] which statistical significance is relevant to
[23] surveys.
[24] The second way that it's relevant would

2—12:02:33 25—12:03:51 Page 372
Krosnick
[1] be in cases where experiments are built into
[2] surveys where, as in the case of the SRBI study
[3] respondents are randomly assigned to be asked
[4] different versions of a single question or to be
[5] asked different sequences of questions. Then one
[6] is interested in assessing the likelihood that what
[7] we would call dependent measures or variables that
[8] are thought possibly to be influenced by this
[9] manipulation, were, in fact, influenced by it or
[10] not, and here, statistical significance would be
[11] computed to assess the possibility, then, in the
[12] observed difference between groups of respondents
[13] simply happened by chance versus is likely to
[14] result from a manipulation implemented by the
[15] researcher.
[16] Q: When using or attempting to use surveys
[17] or data from surveys to draw inferences, the
[18] definition we adopted here earlier this morning, is
[19] statistical significance important?
[20] A: Often it is, almost always, yes.
[21] Q: Almost always, it is important, right?
[22] A: Almost always.
[23] Q: Is it important in this case?
[24] A: Yes.

2—12:03:57 25—12:05:08 Page 373
Krosnick
[1] Q: And how do you measure statistical
[2] significance?
[3] A: Well, there are many different ways to
[4] do it, and it depends upon the particular test that
[5] you are conducting, the particular variables
[6] involved, the distributions of responses to the
[7] variables and so on.
[8] Q: Let's take your telephone survey, for
[9] example. Are the results statistically
[10] significant?
[11] A: Well, one wouldn't normally talk about
[12] results as being statistically significant in the
[13] generic term. One would say, is a relationship
[14] between two variables statistically significant, or
[15] is the effect of a manipulation statistically
[16] significant.
[17] Q: Let's take, for example, your motivation
[18] to quit index. When you were developing the
[19] questions and had in mind doing this motivation to
[20] quit index, did you attempt to ensure that the
[21] results would be statistically significant?
[22] MR. HEFTER: Objection.
[23] A: One doesn't take steps to ensure that
[24] results are statistically significant. One tests

2—12:05:11 25—12:06:47 Page 374
Krosnick
[1] whether results are statistically significant.
[2] Q: Did you test whether the results of your
[3] motivation to quit index are statistically
[4] significant?
[5] A: Again, you wouldn't say the results of
[6] an index are statistically significant. You could
[7] say, is an effect on the index statistically
[8] significant, which I did test, is a relationship of
[9] the index to some other variable statistically
[10] significant, which I did test, but you wouldn't
[11] simply say is the index statistically significant.
[12] Q: And you found them to be statistically
[13] significant?
[14] A: In my report, I described tests of
[15] statistical significance, some of which indicated
[16] significant differences, yes, and significant
[17] relationships, yes.
[18] Q: Let's move on. Is there a term in the
[19] survey research literature called social
[20] desirability bias?
[21] A: Yes, there is.
[22] Q: Would you tell us what that is, please.
[23] A: Yes. Social desirability bias has two
[24] components to it, and it is the possibility that

2-12:06:53 25-12:08:30

Page 375

Krosznick

(1) respondents may misreport either behaviors or
(2) beliefs or attitudes in ways that lead them to
(3) appear more admirable by people in general, society
(4) in general.

(5) Q: Is that a problem in survey research?

(6) MR. HEFTER: Objection.

(7) A: If it were to occur, that would reduce
(8) the inaccuracy of measurements, yes.

(9) Q: Reduce the inaccuracy or —

(10) A: Thank you, reduce the accuracy of
(11) measurements.

(12) Q: Are there ways to avoid social
(13) desirability bias in a survey?

(14) A: Yes.

(15) Q: To your knowledge, were there any
(16) methods used to avoid social desirability bias in
(17) connection with the deposition survey?

(18) MR. HEFTER: Objection.

(19) A: No.

(20) Q: Let me ask you whether the following
(21) question is one that is potentially subject to
(22) social desirability bias, okay?

(23) "If you had known cigarettes contained
(24) arsenic when you started, would you have smoked?"

2-12:08:41 25-12:09:16

Page 376

Krosznick

(1) A: Let me answer this way. Extensive
(2) research has investigated the extent to which
(3) social desirability response bias occurs, and the
(4) conditions under which it occurs. What that
(5) research shows is that investigators' intuitions
(6) about whether a particular question is or is not
(7) subject to social desirability response bias is not
(8) scientific, that researchers are not in a good
(9) position to guess when social desirability response
(10) bias will occur and when it will not occur simply
(11) by looking at the wording of an item.

(12) In cases where researchers thought that
(13) there was a powerful social norm, there turned out
(14) not to be. In cases where researchers thought that
(15) there was a powerful social norm, it turned out
(16) that different individuals perceived different
(17) norms. In cases where researchers thought there
(18) was not a norm, it turned out that there was one.

(19) So I don't personally feel qualified to give an
(20) opinion about whether a particular item is or is
(21) not susceptible to social desirability bias.

(22) Q: In your telephone survey, did you take
(23) any steps to avoid social desirability bias?

(24) MR. HEFTER: Objection.

2-12:10:16 25-12:11:25

Page 377

Krosznick

(1) A: Yes.

(2) Q: What steps did you take?

(3) A: Anonymity of respondents is one key
(4) step, confidentiality of responses is a second key
(5) step, and both of those were implemented in that
(6) study.

(7) Q: Did you take any steps to avoid
(8) questions that in and of themselves could produce
(9) social desirability bias?

(10) A: No.

(11) Q: Let me ask you about a couple of other
(12) questions. I want to ask you whether this one is
(13) subject to the social desirability bias.

(14) "Did you know smoking could cause lung
(15) cancer when you started?"

(16) What is your opinion on that one?

(17) A: I do not have an opinion about whether
(18) that item is or is not likely to be subject to
(19) social desirability response bias.

(20) Q: Another one: "Did you think that you
(21) could get lung cancer if you smoked back when you
(22) started smoking?"

(23) What about that one?

(24) A: I don't have an opinion about that one

2-12:11:27 25-12:12:22

Page 378

Krosznick

(1) either in this regard.

(2) Q: And the reason you don't have an opinion
(3) is you don't feel that researchers are qualified to
(4) express opinions about whether particular questions
(5) are subject to social desirability bias, is that
(6) right?

(7) A: No.

(8) Q: Then why is it?

(9) A: I feel that researchers are qualified to
(10) make that assessment because we have developed a
(11) variety of techniques for empirically testing
(12) whether a particular question is subject to social
(13) desirability response bias, but without
(14) implementing those procedures for a particular item
(15) and empirically testing whether it is subject to
(16) this bias or not, I believe that researchers are
(17) not in a position to offer opinions simply based
(18) upon their intuition.

(19) Q: And you didn't conduct any such tests on
(20) any of these questions, did you?

(21) MR. HEFTER: Objection.

(22) A: That is correct.

(23) Q: Nor do you know of anyone else who did?

(24) A: I do not know of anyone else who did.

KROSZNICK
Jan 12, 2001

BLUE CROSS AND BLUE SHIELD v.
PHILIP MORRIS

2--12:12:24 25--12:13:45

Page 379

Krosnick

Q: And you didn't implement any of those procedures in connection with your telephone survey, did you?
A: No, that isn't correct.
Q: What procedures did you implement other than anonymity of respondents to ensure against the social desirability bias in connection with your survey?
MR. HEFTER: Objection.
A: Confidentiality.
Q: What methods other than confidentiality and anonymity did you implement in connection with your telephone survey to ensure against the social desirability bias?
MR. HEFTER: Objection.
A: Nothing else.
Q: Did you do any tests or any analyses to see whether or not social desirability bias resulted in your telephone survey?
A: No.
Q: To your knowledge, did anyone do any tests or analyses to determine whether social desirability was present in any of the questions asked in the deposition survey?

2--12:13:50 25--12:14:35

Page 380

Krosnick

A: Normally we would not say that social desirability was present in questions.
Q: Did you test or do you know of anyone who tested or analyzed whether or not there was social desirability bias present in connection with the deposition survey?
A: No, I do not.
Q: Are there means for avoiding social desirability bias other than anonymity and confidentiality of survey respondents?
A: Yes, there are.
Q: What are they?
A: One is called the randomized response technique.
The second one is called the bogus pipeline technique.
Q: Bogus what?
A: Pipeline, p-i-p-e-l-i-n-e.
A third approach is to measure and statistically control for individuals' dispositions to offer socially desirable answers.
Q: Is that it?
A: That's what I am remembering at the moment.

2--12:15:36 25--12:16:38

Page 381

Krosnick

Q: Were any of those three methods employed in connection with your telephone survey?
A: No.
Q: Were any of those three methods employed in connection with the deposition survey?
A: No.
Q: Is there something in the survey literature called self-deception bias?
A: Yes.
Q: Would you describe that for us?
A: It actually doesn't have a large place in the survey methodology literature. It's present more in the social psychology literature, and it's related to, it's an element of social desirability response bias that, in essence, social desirability response bias can occur in one of two ways. Either because a respondent intentionally chooses to misrepresent himself or herself to the researcher, or because the respondent doesn't intentionally choose to do it, but, rather, an element of the nonconscious mind leads them to do it without their conscious decision to do so. The latter would be called self-deception.
Q: Is there a difference between the latter

2--12:16:40 25--12:17:46

Page 382

Krosnick

and what is sometimes referred to as cognitive dissonance?
A: Absolutely.
Q: Tell us what the difference is, please.
A: Cognitive dissonance is a theory that comes from a very different tradition. The theory simply says in very general terms that under some circumstances people find it unpleasant to hold two beliefs that are logically inconsistent with one another, and the unpleasantness that people experience is called dissonance and is thought to inspire people under such circumstances to take one of various steps to reduce the dissonance.
Q: Is self-deception bias a problem, potential problem in connection with survey research?
A: Yes, it's a potential problem.
Q: Did you do anything to avoid self-deception bias in connection with the telephone survey?
MR. HEFTER: Objection.
A: No, no, I did not.
Q: To your knowledge, was anything done in connection with the deposition survey to avoid

2-12:17:47 25-12:18:53

Page 383

Krosnick

(1) self-deception bias?

(2) MR. HEFTER: Objection.

(3) A: No. There really are not

(4) well-established techniques for doing that.

(5) Q: Let me show you a copy of your report,

(6) which I think was marked at the last deposition as

(7) deposition Exhibit 1. If you will, turn to page

(8) 28.

(9) MR. HEFTER: I don't need an extra copy,

(10) but if I can just have a second to open up

(11) my briefcase to get it —

(12) MR. BLEAKLEY: Okay.

(13) MR. HEFTER: Thank you.

(14) Q: Paragraph 76, do you see that?

(15) A: Uh-huh.

(16) Q: In paragraph 76, you say, "There is a

(17) theoretical basis for expecting that at least some

(18) of the above correlation between health beliefs and

(19) smoking behavior is due to post-hoc rationalization

(20) of smoking behavior."

(21) Do you see that?

(22) A: Yes.

(23) Q: Tell us what you mean by post-hoc
(24) rationalization of smoking behavior?

2-12:18:56 25-12:20:36

Page 384

Krosnick

(1) A: In this case, once a smoker has

(2) initiated regular smoking, that person may have two

(3) beliefs that are inconsistent with one another.

(4) One belief is I smoke cigarettes regularly, the

(5) second is smoking is dangerous to my health, and

(6) that would potentially, for some individuals,

(7) create a sense of dissonance.

(8) Q: Does post-hoc rationalization of

(9) behavior, and in this case smoking behavior,

(10) present a potential problem in connection with

(11) survey research?

(12) MR. HEFTER: Objection.

(13) A: I am not really — I am not — I am not

(14) clear how to answer that.

(15) If one's goal in survey research, as is

(16) typically the case, is to measure people's

(17) perceptions, measure people's behavior, measure

(18) their attitudes and so on, that it's not a problem

(19) for survey research at all, so I am not sure — I

(20) am having trouble thinking of a way in which it

(21) would be a problem. Therefore —

(22) Q: Does the fact that smokers engage in

(23) post-hoc rationalization of their smoking behavior

(24) present a problem in terms of the survey research

2-12:20:39 25-12:21:56

Page 385

Krosnick

(1) that you conducted?

(2) A: A premise of your question is that

(3) smokers do this. I haven't actually seen a

(4) convincing body of evidence to make the case that

(5) smokers do that. If smokers did do that, that —

(6) and the reason that I raise this here on this page

(7) in my report, is that it would suggest an

(8) alternative interpretation to correlations that I

(9) mentioned on an earlier page in the report other

(10) than the one that is the focus of my analysis.

(11) Q: Is it your opinion as an expert to a

(12) reasonable degree of scientific certainty or

(13) probability that smokers do not engage in post-hoc

(14) rationalization of their smoking behavior?

(15) MR. HEFTER: Objection.

(16) A: Well, I am going to use as a definition

(17) of post-hoc rationalization of smoking behavior,

(18) the definition that I implied by its use in this

(19) paragraph, and there what I simply meant was that

(20) smokers may adjust their beliefs about the health

(21) risks of smoking so as to reduce perceptions of

(22) risk involved.

(23) I have not seen a body of scientific

(24) evidence that allows me to reach the conclusion to

2-12:21:59 25-12:23:36

Page 386

Krosnick

(1) a reasonable degree of scientific probability or

(2) certainty that smokers do engage in such post-hoc

(3) rationalization of smoking behavior.

(4) Q: What do you think? Do you think they do

(5) or they don't?

(6) A: So now think has a different meaning

(7) than to a reasonable degree of scientific

(8) certainty. I will interpret that as meaning do I

(9) suspect that they might.

(10) I think certainly it is possible that

(11) they might, but I don't have an opinion on this

(12) matter that I can base on solid scientific

(13) evidence.

(14) Q: Is asking questions in a survey that

(15) asks for recall of past events a source of

(16) potential bias in survey research?

(17) MR. HEFTER: Objection.

(18) A: I wouldn't say it is a source of bias,

(19) no.

(20) Q: That sounded like a qualification. What

(21) do you think it is if it is not a source of bias?

(22) A: It's just a — it's just asking.

(23) Q: Let me ask you this: Is people's recall

(24) of past events something that you normally rely on

2-12:23:38 25-12:25:05 Krosnick Page 387	2-12:26:06 25-12:27:09 Krosnick Page 389
<p>[1] in survey research?</p> <p>[2] A: Yes.</p> <p>[3] Q: Do people tend to recall past events</p> <p>[4] accurately?</p> <p>[5] A: Yes.</p> <p>[6] Q: Does their ability to recall past events</p> <p>[7] diminish over time?</p> <p>[8] A: Not consistently.</p> <p>[9] Q: Is asking people about past events a</p> <p>[10] potential source of measurement error?</p> <p>[11] MR. HEFTER: Objection.</p> <p>[12] A: No, I wouldn't say so, no.</p> <p>[13] Q: Is asking people in a survey about their</p> <p>[14] recall of past beliefs a source of bias or a</p> <p>[15] measurement error?</p> <p>[16] MR. HEFTER: Objection.</p> <p>[17] A: No.</p> <p>[18] Q: Is asking people for their recall of</p> <p>[19] past attitudes a source of potential bias or</p> <p>[20] measurement error?</p> <p>[21] MR. HEFTER: Objection.</p> <p>[22] A: No.</p> <p>[23] Q: So when you are designing a survey, it</p> <p>[24] doesn't trouble you at all that you are asking</p>	<p>[1] the wrong way and if you do, the results aren't</p> <p>[2] reliable.</p> <p>[3] MR. HEFTER: Objection.</p> <p>[4] A: I definitely did not say that.</p> <p>[5] Q: Okay. I will ask the question again.</p> <p>[6] Is it your testimony and your opinion</p> <p>[7] that asking people in surveys to recall past</p> <p>[8] events, attitudes and beliefs, does not present a</p> <p>[9] potential problem of bias or measurement error?</p> <p>[10] MR. HEFTER: Objection.</p> <p>[11] A: Every measurement in surveys involves</p> <p>[12] the potential for bias and measurement error, so —</p> <p>[13] Q: Then the answer to my question is yes?</p> <p>[14] MR. HEFTER: Objection.</p> <p>[15] A: I guess I am trying as best I can to</p> <p>[16] provide a helpful answer. I think I interpreted</p> <p>[17] your questions to be saying, does merely asking</p> <p>[18] people those types of questions present an</p> <p>[19] opportunity for that bias, and I took it to be that</p> <p>[20] uniquely or especially or particularly powerfully,</p> <p>[21] and the answer I just gave a moment ago is, I</p> <p>[22] think, the way I should answer it, which is to say</p> <p>[23] not uniquely, because every measurement has the</p> <p>[24] potential for measurement error and bias.</p>
2-12:25:07 25-12:26:06 Krosnick Page 388	2-12:27:12 25-12:28:23 Krosnick Page 390
<p>[1] people to recall past events, beliefs or attitudes?</p> <p>[2] A: That's a very different question.</p> <p>[3] Q: Does it?</p> <p>[4] A: It depends on how you do it. If it's</p> <p>[5] done in —</p> <p>[6] Q: What does that mean?</p> <p>[7] A: Well, as I said in my last deposition</p> <p>[8] and earlier today, there are ways to ask questions</p> <p>[9] that increase the likelihood of accuracy and other</p> <p>[10] ways that decrease the likelihood of accuracy of</p> <p>[11] responses, and so just simply asking the question</p> <p>[12] as you have phrased it in these generic terms</p> <p>[13] doesn't trouble me, but looking at the specifics of</p> <p>[14] how it is done would provide a basis for assessing</p> <p>[15] whether it is done in a way that increases or</p> <p>[16] decreases the likelihood of accurate measurement.</p> <p>[17] Q: If there are ways of asking questions</p> <p>[18] that decreases the likelihood of getting accurate</p> <p>[19] answers, isn't that a source of bias or measurement</p> <p>[20] error?</p> <p>[21] A: I am sorry, could I hear that one more</p> <p>[22] time or do you —</p> <p>[23] Q: I will ask it differently.</p> <p>[24] I thought you just said you can do it</p>	<p>[1] Q: In general, do people's recall of</p> <p>[2] events, beliefs or attitudes that took place a long</p> <p>[3] time ago, do they tend to be accurate or</p> <p>[4] inaccurate?</p> <p>[5] MR. HEFTER: Objection.</p> <p>[6] A: What do you mean by "a long time ago"?</p> <p>[7] Q: 25 or 30 years ago.</p> <p>[8] A: There have been some studies done of the</p> <p>[9] accuracy of recall stretching over that long a</p> <p>[10] period of time, and those studies have shown very</p> <p>[11] high levels of accuracy in recall.</p> <p>[12] Q: So in your opinion, do people's recall</p> <p>[13] of beliefs, attitudes or events that took place 25</p> <p>[14] or 30 years ago tend to be accurate or inaccurate?</p> <p>[15] MR. HEFTER: Objection.</p> <p>[16] A: In my opinion, studies that have been</p> <p>[17] done assessing recall accuracy over that length of</p> <p>[18] time have shown high levels of accuracy for recalls</p> <p>[19] of attitudes and beliefs.</p> <p>[20] Q: Did you take any steps in connection</p> <p>[21] with the telephone survey to protect against the</p> <p>[22] possibility that people would not be able to recall</p> <p>[23] past events, beliefs or attitudes?</p> <p>[24] MR. HEFTER: We are talking about the</p>

2-12:28:24 25-12:29:39 Page 391
Krosnick

(1) SRBI survey?

(2) Q: Your telephone survey, the SRBI survey.

(3) A: Could I hear the question one more time?

(4) Q: Did you take any steps to avoid this

(5) problem, this particular problem?

(6) MR. HEFTER: Objection.

(7) A: Which problem?

(8) Q: The problem that people may not remember

(9) accurately past events, beliefs or attitudes, did

(10) you take any special steps to ensure that that

(11) wouldn't happen here?

(12) A: I did not because the focus of my

(13) measurement in that study was not the measurement

(14) of recollections of past attitudes, beliefs or

(15) behavior.

(16) Q: Do you know whether any such steps were

(17) taken in connection with the deposition survey?

(18) MR. HEFTER: Objection.

(19) A: Yes, I believe steps were taken.

(20) Q: What are those steps?

(21) A: Well, one step was for people to provide

(22) those depositions under oath, and being under oath,

(23) I think, has the potential to enhance the care with

(24) which people provide reports of anything. That is,

2-12:29:44 25-12:31:22 Page 392
Krosnick

(1) Of course, what the legal system believes in when

(2) it uses putting people under oath as a part of its

(3) proceedings, and that seems to me a reasonable

(4) supposition.

(5) Q: Let me stop you there.

(6) Does putting people under oath make them

(7) remember better?

(8) A: I think, as I just said, I think that's

(9) a reasonable assumption to make, yes.

(10) Q: Okay.

(11) A: Secondly, there were some questions

(12) asked of people where visual aids were used. So,

(13) in other words, the respondents were shown pieces

(14) of paper, copies of documents and so on, and I

(15) think those steps enhanced the likelihood that

(16) people could provide accurate reports about those

(17) documents as compared to if they had only been

(18) described in abstract terms verbally.

(19) I am not thinking of other examples at

(20) the moment.

(21) Q: To what documents are you referring when

(22) you say that the use of documents helps people

(23) remember? What documents?

(24) A: I am referring to what, to me, have been

2-12:31:24 25-12:32:40 Page 393
Krosnick

(1) called exhibits that the lawyers presented to the

(2) deponents during the sequence of questioning in

(3) some or all depositions.

(4) Q: What exhibits, if you recall, helped

(5) them remember?

(6) A: I am referring to questions asking

(7) people do you remember having seen this document

(8) before, for example, and I don't remember

(9) specifically which documents were used in those

(10) questions.

(11) Q: What if the deponent said "No, I have

(12) never seen it before"? Does that help them

(13) remember their attitudes, beliefs or recall past

(14) events?

(15) MR. HEFTER: Objection.

(16) A: I am having trouble with the question.

(17) Does answering a certain way affect

(18) other answers? Is that what you are asking me?

(19) Q: No. I am asking you to assume for the

(20) moment that a document that was shown to a deponent

(21) in connection with questions about recall of past

(22) behavior, attitudes and beliefs is, in fact, a

(23) document that the deponent has never seen before,

(24) and I am asking you whether, in your opinion,

2-12:32:43 25-12:33:48 Page 394
Krosnick

(1) showing the deponent a document that he or she has

(2) never seen before helps them remember past events,

(3) attitudes and beliefs.

(4) MR. HEFTER: Objection.

(5) A: Yes, yes.

(6) Q: And how is that?

(7) A: Well, if the question of interest is

(8) whether this deponent has been exposed to this

(9) document before, that providing it visually in

(10) front of him or her enhances his or her

(11) understanding of what this document actually said

(12) and what it looked like, and by providing that

(13) information which would not have been provided if,

(14) instead, someone had simply summarized what the

(15) document said in fewer words or described that in

(16) terms of its visual appearance, it increases the

(17) likelihood that respondents will be accurate in

(18) answering that question about whether they have or

(19) have not seen it before.

(20) Q: In answering the question about whether

(21) they have or have not seen that document before —

(22) A: Yes. That's all I was referring to.

(23) Q: My question is, does showing a person a

(24) document they have never seen before aid a deponent

2-12:33:52 25-12:34:55 Page 395
Krosnick
(1) in remembering past events, attitudes or beliefs
(2) that are not reflected in that document?
(3) MR. HEFTER: Objection.
(4) A: That are not reflected in that document?
(5) I am trying to be helpful here, I am
(6) sorry. I am saying that I think that it would —
(7) that presenting the document would enhance the
(8) accuracy of people's answers to questions about the
(9) document, and I don't see any implications of it
(10) with regard to answering other questions that don't
(11) have to do with the document, if that's what you
(12) are asking.
(13) Q: I am asking you whether it would help
(14) them in remembering.
(15) A: Remembering what?
(16) Q: Remembering past events, beliefs and
(17) attitudes that are not reflected in that document.
(18) A: That is what I — that are not reflected
(19) is where I get thrown off because
(20) Q: Reflected, printed, appear in, talked
(21) about or discussed.
(22) A: So the question, in other words, that
(23) the deponent is asked, is "Here is a document.
(24) Have you ever seen this document before," and the

2-12:34:57 25-12:35:13 Page 396
Krosnick
(1) document, let's just say, is the Frank Statement to
(2) Cigarette Smokers.
(3) The deponent's answer to that question
(4) is a statement of his or her past behavioral
(5) experience, and so I am saying, yes, seeing that
(6) document would enhance the accuracy of statements
(7) about that deponent's past behavioral experience.
(8) Q: Insofar as it asks, it involves whether
(9) or not he or she has ever seen that document?
(10) A: Yes.
(11) Q: Asking questions about what a
(12) respondent, a survey respondent would have done in
(13) a hypothetical situation, does that present a
(14) potential problem in survey research?
(15) MR. HEFTER: Objection.
(16) A: Yes.
(17) Q: What is the problem that it presents?
(18) A: It requires respondents to make
(19) difficult inferences in many situations.
(20) Q: Is asking those kinds of questions
(21) something that one should avoid in survey research?
(22) A: When one can avoid it, yes.
(23) Q: I think we've previously discussed, and
(24) you have agreed that leading questions should be

2-12:36:14 25-12:37:13 Page 397
Krosnick
(1) avoided.
(2) A: Yes.
(3) Q: Questions that push a respondent in a
(4) certain direction should be avoided?
(5) MR. HEFTER: Objection.
(6) A: Yes.
(7) Q: Questions that suggest the answer should
(8) be avoided, right?
(9) A: I hesitate on that. You and I have
(10) discussed that phrase before and I am not sure I
(11) understand it, so I am hesitating to agree with
(12) that one, but I am with you up to there.
(13) Q: Have you ever heard of something called
(14) the fallacy of counterfactual conditions in
(15) connection with survey research?
(16) A: Not phrased quite like that, no.
(17) Q: Have you heard it phrased — I may be
(18) not saying it correctly.
(19) Have you heard something like that?
(20) A: I can't think of a phrase — I mean, I
(21) have heard of the word "fallacy" used, I have heard
(22) the word "counterfactual" used, but that phrase
(23) doesn't connect with me.
(24) Q: Does asking people in surveys about

2-12:37:14 25-12:38:17 Page 398
Krosnick
(1) their future intentions present a source of bias?
(2) MR. HEFTER: Objection.
(3) A: No.
(4) Q: Can it be done accurately?
(5) A: Yes.
(6) Q: Does asking people about their future
(7) intentions raise any issues about the validity of
(8) survey research?
(9) A: No more so than any other decision.
(10) Q: Can people be believed when they are
(11) asked in surveys about their future intentions?
(12) A: Yes.
(13) Q: How do you know?
(14) A: Well, the principal reason is that
(15) measurements of future intentions typically predict
(16) future behavior extremely well, and that would be
(17) an example of convergent validity, just as we spoke
(18) about earlier today. That would give you
(19) confidence in all of the measurements involved, not
(20) only in the measurement of the behavior involved,
(21) but also people's statements of their intentions.
(22) In addition, people's reports of
(23) intentions behave in sensible ways in terms of
(24) factors causing them and then having other impact

2-12:38:20 25-12:39:30

Page 399

Krosnick

[1] on other beliefs and attitudes, so, in fact,
[2] intentions have been the focus of a great deal of
[3] study in social science.

[4] Q: How about future behavior, asking people
[5] what their future behavior is going to be, does
[6] that present a problem in survey research?

[7] A: Not uniquely, not any more so than other
[8] measurements, no.

[9] Q: Are there any steps that can be taken to
[10] make it more likely that those answers or responses
[11] to those kinds of questions can be believed or can
[12] be used for making inferences?

[13] A: Yes. Everything that we do to make a
[14] survey reliable and valid would help in achieving
[15] that goal, yes.

[16] Q: What are they, when we are talking about
[17] future behaviors? What are the steps you can take?

[18] A: Everything we talked about already:
[19] seeing to it that questions are not asked in a
[20] biased way; seeing to it that respondents are
[21] engaged, motivated; protecting anonymity. The
[22] whole list of everything it takes to do a good
[23] survey.

[24] Q: In survey research, is there a

2-12:39:31 25-12:40:57

Page 400

Krosnick

[1] difference between awareness and belief?

[2] A: I am hesitating a little bit on survey
[3] research, but in the social sciences, generally,
[4] yes, absolutely, there is a distinction.

[5] Q: What is the difference?

[6] A: Well, awareness actually has two
[7] different meanings. One meaning of awareness
[8] involves an aspect of perception at the moment, so,
[9] in other words, if I were to say to you, are you
[10] aware that somebody dropped a pencil at the other
[11] end of the table, that would be essentially asking
[12] you whether your conscious mind registered that
[13] event or were you distracted by other events
[14] happening at the time and therefore did not
[15] perceive that event happening at the time that it
[16] occurred. That's one definition of aware.

[17] A second definition of awareness that I
[18] have seen in some social science research really
[19] refers to remembering exposure to particular
[20] information. It's not that there is a particular
[21] event that happens at a moment in time, like a
[22] pencil dropping, but rather, you could ask people,
[23] are you aware that some other individuals believe
[24] that smoking is dangerous, and that belief is not

2-12:41:01 25-12:42:14

Page 401

Krosnick

[1] an event that occurred at any given moment,
[2] although it could be revealed by events that
[3] occurred at discrete moments, but here it's really
[4] aware is in some sense a synonym for do you know
[5] this, do you have this piece of information.

[6] Now, believing something is different,
[7] in our literature, because, in other words, you can
[8] be aware that the Surgeon General has said smoking
[9] is dangerous, but that does not mean that you
[10] necessarily believe that smoking is dangerous, that
[11] there is this distinction between awareness that
[12] others have stated this and your own personal
[13] endorsement or acceptance of a fact or an
[14] assertion.

[15] Is that helpful?

[16] Q: Which does a smoker need in order to
[17] make a decision about whether to continue smoking:
[18] Awareness that the Surgeon General and others have
[19] said that smoking causes disease, or belief?

[20] MR. HEFTER: Objection.

[21] A: This brings us to territory that we were
[22] in at the end of my last deposition, which asks --
[23] in which you asked me to make a statement about
[24] what smokers do or do not need, and it is my belief

2-12:42:27 25-12:43:47

Page 402

Krosnick

[1] that, as a social science professional, I am not in
[2] a position to determine what any person needs or
[3] does not need. That can be answered in a couple of
[4] different ways. One, the individual himself or
[5] herself can make a determination of what he or she
[6] feels that he or she must have in order to make a
[7] decision. It is also possible to answer that
[8] question from a legal point of view whether a
[9] person must or must not be provided with some piece
[10] of information. But as a social scientist, I am
[11] not in a position to assess whether somebody needs
[12] or does not need a particular piece of information
[13] in order to make a decision.

[14] Q: So if I understand your testimony
[15] correctly, you don't know whether or which ones of
[16] the 50 million people who have stopped smoking in
[17] this country did so because they were aware or
[18] because they believed that cigarette smoking was
[19] bad for you; is that right?

[20] MR. HEFTER: Objection.

[21] A: Let me answer this way: I will answer
[22] this using the word "awareness" to refer to what I
[23] said a moment ago, that is aware that other people
[24] have asserted that smoking may be dangerous or is

52434 5510

2—12:43:48 25—12:45:04 Page 403
Krosnick
(1) dangerous to health.
(2) The research that I reviewed in my first
(3) report focuses not on that awareness but instead
(4) focuses on respondents' own beliefs about whether
(5) smoking is or is not dangerous to health, and the
(6) studies that I reviewed in that report show that
(7) beliefs about the health consequences of smoking are
(8) primary instigators of quitting smoking. 80-plus
(9) percent of respondents, of people who quit smoking,
(10) appear to do so principally because of health
(11) concerns, so those beliefs do appear to play a very
(12) major role in instigating quitting.
(13) It is my opinion as well that awareness
(14) of assertions by others regarding whether smoking
(15) does or does not have dangerous health consequences
(16) are important determinants of people's beliefs
(17) about whether smoking does or does not have such
(18) health consequences. They are not the only
(19) determinants, but they are important determinants
(20) in playing a role.
(21) So therefore, in my opinion, there is a
(22) causal chain whereby people are aware of statements
(23) by others which then influence their own beliefs,
(24) which then, in turn, influences their own behavior.

2—12:45:07 25—12:46:23 Page 404
Krosnick
(1) Q: Did you evaluate the deposition survey
(2) in order to determine whether or not there were any
(3) leading questions asked?
(4) MR. HEFTER: Objection.
(5) A: I was not asked to evaluate the
(6) questions in that survey, nor have I done so, other
(7) than at your instigation during my first deposition
(8) when you asked me about a couple of questions and
(9) said, does that sound like a leading question to
(10) you.
(11) Q: Did you ask any leading questions in
(12) your telephone survey?
(13) MR. HEFTER: Objection.
(14) A: No.
(15) Q: Is there something in the survey
(16) literature called acquiescence bias?
(17) A: Yes, there is.
(18) Q: Would you tell us what that is.
(19) A: Acquiescence response bias comes up in
(20) questions with particular sets of response choices.
(21) Most frequently, it's been studied with regard to
(22) questions that involve agree/disagree response
(23) choices. That can be in a simple dichotomous case
(24) where I say do you agree or disagree with the

2—12:46:23 25—12:47:35 Page 405
Krosnick
(1) following statement, or it could be in a case where
(2) I offer you a rating scale to represent degree of
(3) agreement or disagreement. So I might say do you
(4) strongly agree, somewhat agree, neither agree nor
(5) disagree, slightly disagree, and so on.
(6) The second type of question is
(7) true/false questions, that is questions that
(8) involve answer choices asking people whether they
(9) believe something to be true or false.
(10) The third category are questions where
(11) the implicit answer choices are yes and no, and in
(12) those questions, typically, we don't offer them, we
(13) say, did you go to the baseball game yesterday. We
(14) don't say, did you go to the baseball game, yes or
(15) no. That response understands implicitly that yes
(16) and no are the answer choices there.
(17) For those three types of questions, a
(18) great deal of research has shown that a small group
(19) of respondents, 10 to 20 percent of respondents,
(20) regardless of population — apparently this shows
(21) up quite consistently across different
(22) populations — are inclined to agree with, say true
(23) to, say yes to many contradictory statements.
(24) So, in other words, you could say, do

2—12:47:37 25—12:49:19 Page 406
Krosnick
(1) you agree or disagree — do you agree or disagree I
(2) am mainly a friendly person, do you agree or
(3) disagree I am mainly an unfriendly person. There
(4) is a small group of respondents who will agree with
(5) both of those assertions, despite the fact that
(6) they appear to be opposite or opposing one another
(7) in character.
(8) Acquiescence bias happens more under
(9) some conditions than others, it happens more among
(10) some individuals than other individuals.
(11) Q: Does acquiescence bias tend to become
(12) more pronounced toward the end of a long interview
(13) than it does at the beginning?
(14) MR. HEFTER: Objection.
(15) A: Yes, I believe there is evidence
(16) consistent with that assertion.
(17) Q: Does acquiescence bias present more of a
(18) potential for bias with older survey respondents
(19) than it does with younger survey respondents?
(20) A: We have to be careful about a definition
(21) of older versus younger. My read of the literature
(22) actually is that very young respondents, under the
(23) age of 15 and going down, actually show increases
(24) in acquiescence response bias, as do individuals

2-12:49:24 25-12:50:40 Page 407
Krosnick
(1) older than age 70, and that middle age group
(2) appears to be the least susceptible to it, in
(3) between, say, 20 to 65.
(4) Q: How about between the ages of 20 and 65,
(5) is there a difference?
(6) A: I don't believe that the literature
(7) reliably shows it at the moment.
(8) Q: Is there an increased potential for
(9) bias, acquiescence bias, in responding to questions
(10) about socially desirable behavior?
(11) A: No.
(12) Q: Is there an increased risk of increased
(13) danger of acquiescence bias when asking people
(14) questions about the self-deception bias, the
(15) questions that have potential for self-deception
(16) bias?
(17) MR. HEFTER: Objection.
(18) A: No.
(19) Q: Were any steps taken in connection with
(20) the deposition survey to avoid acquiescence bias?
(21) MR. HEFTER: Objection.
(22) A: Yes.
(23) Q: What were those steps that were taken?
(24) A: Again, I believe that placing

2-12:50:42 25-12:52:30 Page 408
Krosnick
(1) respondents under oath would lead to a reduction of
(2) the likelihood of acquiescence response bias, and
(3) to be clear, with regard to the purposes to which
(4) those depositions are being put, another element
(5) that reduces the likelihood of acquiescence bias
(6) distorting results is the fact that attorneys from
(7) both sides asked questions within the context of a
(8) single deposition, where to the extent that yes/no
(9) questions were phrased in ways that yes answers had
(10) particular meaning consistent with the agenda of
(11) the attorney, those agendas were in opposing
(12) directions, and therefore, any coders who read the
(13) entire transcript and took into account answers to
(14) all questions in reaching any judgment would do so
(15) keeping in mind the balance of acquiescence bias
(16) pushing response in one direction at one time
(17) during the interview and at another time, in
(18) another direction at another time.
(19) Q: I believe you previously said that —
(20) MR. BLEAKLEY: Skip that.
(21) A: Sorry, I just want to be sure there
(22) aren't any other steps.
(23) Q: All right.
(24) A: No, I don't think so.

2-12:52:32 25-12:53:58 Page 409
Krosnick
(1) Q: I think we previously discussed that,
(2) and you discussed earlier here this morning, there
(3) is what I will call, whether you call it or not,
(4) interviewer bias, right?
(5) A: I don't think we discussed that yet
(6) today, but, okay.
(7) Q: There is a potential for interviewer
(8) bias in connection with surveys, right?
(9) A: Yes.
(10) Q: Do you think that interviewer bias was a
(11) problem in connection with the deposition survey?
(12) MR. HEFTER: Objection.
(13) A: Interviewer bias is, in my opinion,
(14) impact on the answers that people give driven by
(15) the hopes or expectations of a question, and
(16) interviewer bias can also occur not driven by that
(17) person's hopes or expectations mediated by his or
(18) her behavior, but actually can occur simply by
(19) respondents observing physical characteristics of
(20) the interviewer, tone of voice, way of speaking,
(21) clothing and so on.
(22) Respondents — excuse me, deponents
(23) certainly observed a lot about questioners in
(24) deposition surveys, physical gestures, ways of

2-12:54:01 19-12:55:15 Page 410
Krosnick
(1) speaking and so on, behaving, and the flexibility
(2) that the attorneys had in phrasing questions also
(3) allows for the possibility of what would be called
(4) interviewer bias in that setting.
(5) Now, again, because attorneys from both
(6) sides in the case were asking questions and
(7) presumably were doing so in a way that if it
(8) created interviewer bias would be in opposite
(9) directions, there is a good likelihood that that
(10) bias that's present in answering any single
(11) question would cancel out once a coder reads and
(12) takes into account the entire transcript when
(13) coding in a particular manner.
(14) MR. BLEAKLEY: Want to stop for lunch?
(15) MR. HEFTER: That would be great.
(16) THE VIDEOGRAPHER: The time is 12:56
(17) p.m. We are going off the record.
(18) (Luncheon recess: 12:56 p.m.)
(19)
(20)
(21)
(22)
(23)
(24)
(25)

6-14:22:16 25-14:23:36 Page 411
Krosnick
(1) AFTERNOON SESSION
(2)
(3) (Time noted: 2:23 p.m.)
(4) J O N A. K R O S N I C K, resumed and
(5) testified as follows:
(6) MR. HEFTER: Before we begin, Peter, I
(7) just want to make the record clear that at
(8) about 2:20 we did provide you with the
(9) documents that you requested earlier this
(10) morning.
(11) MR. BLEAKLEY: Well, we are going to
(12) make copies of them and mark them as
(13) exhibits and look at them when we have a
(14) chance.
(15) EXAMINATION BY (Cont'd.)
(16) MR. BLEAKLEY:
(17) Q: Dr. Krosnick, do you think there are any
(18) weaknesses in the SRBI survey?
(19) MR. HEFTER: Objection.
(20) A: I am going to interpret weaknesses as
(21) meaning aspects of the design of the study that
(22) introduce systematic bias or that could have been
(23) done differently so as to enhance the value of the
(24) data in reaching the inferences for which the study
(25) was designed.

2-14:24:07 25-14:25:33 Page 412
Krosnick
(1) I am not thinking of any at the moment.
(2) Q: When you amended my question, and I
(3) accept your amendment, you talked about the design
(4) of the study. What about in the conduct of the
(5) study?
(6) A: I am sorry, I should say and conduct as
(7) well.
(8) Q: You meant to include conduct.
(9) A: Yes. Thank you.
(10) Q: So you are unable to think of any
(11) weaknesses in the design or conduct of the SRBI
(12) study as defined the way you just defined it?
(13) A: That's correct.
(14) Q: Do you think there are any weaknesses in
(15) the deposition survey?
(16) MR. HEFTER: Objection.
(17) A: Just to be clear, I am going to
(18) interpret weaknesses just the way I did a moment
(19) ago.
(20) I guess — you know, I had designed that
(21) effort to measure in those people the variables
(22) that are cataloged in the coding questions that we
(23) used to analyze the deponents' data.
(24) I would have had a traditional survey
(25)

2-14:25:57 25-14:27:42 Page 413
Krosnick
(1) interviewer not involved in the dispute with no
(2) particular bias one way or another, interview — I
(3) would have had multiple interviewers, but each
(4) deponent would have been interviewed by one
(5) interviewer who used the standard set of questions
(6) that were worded carefully to be delivered
(7) identically to every respondent, deponent, and I
(8) would have worded those questions in ways different
(9) from the way many of the questions were worded in
(10) the depositions as they occurred.
(11) I wouldn't have drawn the sample any
(12) differently, I wouldn't have done the coding any
(13) differently than I did do it.
(14) So that's the extent of it.
(15) Q: How and why would you have worded the
(16) questions differently?
(17) A: Well, in the approach that I am thinking
(18) of, I would have had only a single questioner
(19) asking the questions and I would have avoided what
(20) we call unbalanced yes/no questions, which were
(21) common in these depositions, and instead asked what
(22) are called balanced choice questions and I would
(23) not have had the sort of improvisational follow-ups
(24) to the descriptive questions, because, of course,
(25)

2-14:27:46 25-14:29:16 Page 414
Krosnick
(1) in the depositions as they occurred, the attorneys
(2) often did follow a prescribed list of questions,
(3) predesigned, and often read them very close to the
(4) wording that was prescribed for them, but following
(5) each of those questions there was sometimes
(6) improvisational probing questions, and that, of
(7) course, requires a certain degree of expertise that
(8) the legal context brings to attorneys, but a survey
(9) interviewer who is not particularly involved in the
(10) endeavor does not necessarily have that sort of
(11) expertise to do that sort of probing, so I would
(12) have eliminated that.
(13) And I would have seen to it that each —
(14) that the script, or perhaps you would call it
(15) questionnaire, addressed each of the, we could say
(16) coding questions or the topics of interest, the
(17) variables to be measured, so that everyone was
(18) asked about all of them the same way.
(19) Q: Why would you have done this
(20) differently?
(21) A: Well, frankly, that is the mode in which
(22) I am used to working, and that's a mode in which
(23) most surveys are done. Again, this deposition
(24) approach is not something that's done commonly in
(25)

2-14:29:20 25-14:30:48

Page 415

Krosnick

(1) surveys, but that doesn't — I don't have any
(2) empirical evidence to show that the quality of the
(3) measurements that came out of these depositions is
(4) any less good than the quality of measurements that
(5) would come out of my approach, but my approach is
(6) one that I am used to and I know would enhance the
(7) likelihood that you have clear indications from
(8) each deponent on each of the matters of interest.

(9) That's it.

(10) Q: In connection with your work on this
(11) case, have you been asked to review and analyze any
(12) of the other surveys that have been done in
(13) connection with smoking and health issues, surveys
(14) on awareness and belief?

(15) A: I wasn't asked to. I did it on my own.

(16) Q: Have you provided a written product?

(17) A: Yes.

(18) Q: Where is that?

(19) A: That's in my original report.

(20) Q: Putting aside Professor Viscusi, have
(21) you made any analysis of any of the other surveys
(22) that have been conducted in connection with smoking
(23) and health issues to see whether or not they
(24) followed proper survey design, up-to-date survey

2-14:30:58 25-14:32:14

Page 416

Krosnick

(1) design, conduct techniques?
(2) A: Not thoroughly. The reason being that
(3) my goal in the review of that survey evidence that
(4) I did was to take an approach that is sort of
(5) consistent with a new view in the social sciences
(6) now, based on the concept of meta, meta-a,
(7) meta-analysis.

(8) Meta-analysis is now a popular research
(9) technique because large numbers of studies have
(10) been conducted during the last hundred years on
(11) many topics and it is possible to kind of bring all
(12) of those studies together into a single analysis
(13) and to look for trends overall across them, and
(14) when you do that, if you are looking for trends to
(15) appear over a large set of studies, it isn't quite
(16) as necessary to be carefully attentive to find
(17) details about each of the study's methodologies. I
(18) took that approach and what I found was consistency
(19) across these many studies that I looked at, and so,
(20) if I had seen a lot of inconsistency, that would
(21) have alerted me to perhaps I have to pay attention
(22) to the methods that were used to identify some
(23) surveys being more valuable than others, or in some
(24) other way to understand why different studies

2-14:32:15 25-14:33:27

Page 417

Krosnick

(1) reached different conclusions. I didn't find that.
(2) Therefore, I didn't need to do that.

(3) In addition, I confined my attention to
(4) studies that were conducted by reputable, high
(5) prestige survey research firms, and as a general
(6) rule, firms with names like Gallup are very
(7) unlikely to depart from best practices as
(8) understood at the time of the work. So you can
(9) have some confidence in the quality of the work
(10) simply based on who did it, and so that also
(11) accounts for my lack of detailed analysis of the
(12) procedures implemented.

(13) Q: Is it your intention to offer any
(14) testimony in this case criticizing the design or
(15) conduct of any prior surveys' research that has
(16) been done in connection with smoking and health
(17) other than Professor Viscusi?

(18) A: I don't have that plan at the moment,
(19) no.

(20) Q: And when I ask whether or not you are
(21) going to do any such criticism, I would include
(22) prior research that you, yourself, have done as
(23) well.

(24) You have no intention of criticizing any

2-14:33:29 25-14:34:46

Page 418

Krosnick

(1) of your own prior research in the area?

(2) A: I have no plans to do that, no.

(3) Q: You look puzzled. I mean, you have done
(4) some research yourself in the area, right?

(5) A: Yes.

(6) Q: You have no intention of going back and
(7) looking at your research and saying, Oh, this
(8) research is outdated or new methodologies have been
(9) developed, and it isn't valid anymore? You are not
(10) going to do that?

(11) A: I can't say I am not going to do it.

(12) All I can tell you is I don't have plans to do it
(13) at the moment.

(14) Q: Do you consider yourself to be an expert
(15) in why people smoke?

(16) A: I have expertise in why people smoke,
(17) yes.

(18) Q: Does that mean to be an answer other
(19) than yes or no to the question I asked, which is
(20) whether or not you are an expert? I mean, I have
(21) an expertise in baseball, too, but I am not an
(22) expert.

(23) A: When you say that, what is the
(24) distinction in your mind?

2—14:34:48 25—14:35:56 Page 419
Krosnick
(1) Q: Do you have an expertise, do you have
(2) the education, training and experience necessary to
(3) qualify you to express expert opinions in court
(4) which you hold to a reasonable degree of scientific
(5) certainty and upon which you expect people to rely?
(6) A: Yes.
(7) Q: On why people smoke?
(8) A: Yes.
(9) Q: You have written that there have been
(10) educational projects aimed at preventing the onset
(11) of cigarette smoking in children, right?
(12) MR. HEFTER: Was there an answer to that
(13) question?
(14) MR. BLEAKLEY: He nodded.
(15) Q: I assume you mean yes.
(16) A: Well, I guess I don't particularly
(17) remember writing that sentence, but I would believe
(18) that I have written that sentence.
(19) Q: Do you remember writing "Only if we
(20) know what social influences lead to smoking can we
(21) effectively design intervention programs to inhibit
(22) it"?
(23) A: I don't remember writing it, but I could
(24) have written it. I could be —
(25)

2—14:36:57 25—14:37:56 Page 420
Krosnick
(1) Q: Would you agree with that statement?
(2) A: Yes.
(3) Q: What antismoking intervention programs
(4) would we be talking about, assuming you wrote it?
(5) MR. HEFTER: Well, do you have an
(6) article that you want to show him?
(7) MR. BLEAKLEY: No.
(8) Q: Are you familiar with any intervention,
(9) any smoking intervention projects that have been
(10) conducted?
(11) A: Yes.
(12) Q: What ones?
(13) A: Well, I worked on one and there are many
(14) others that have been published in the literature.
(15) Q: Have you reviewed them?
(16) A: I have read reports of some of them.
(17) Q: Are you familiar with the Commat
(18) (phonetic) studies?
(19) A: Not particularly by name, no. I may
(20) be — not by name.
(21) Q: Which one did you work on?
(22) A: I worked on a study that we discussed
(23) during my first deposition that was conducted at
(24) the Harvard School of Public Health in the 1970s.
(25)

2—14:37:26 25—14:38:20 Page 421
Krosnick
(1) Q: Do you regard yourself as an expert, and
(2) I asked you whether or not you regarded yourself as
(3) an expert on why people smoke. Do you regard
(4) yourself as an expert on a closely-related question
(5) of what causes people to take up and continue
(6) smoking and what causes them to stop smoking?
(7) A: Yes.
(8) Q: Have you ever heard of Donald Rubin?
(9) A: Yes.
(10) Q: Who is he?
(11) A: Professor of psychology.
(12) Q: Do you know him?
(13) A: Not personally.
(14) Q: Do you know his work?
(15) A: Some of it.
(16) Q: Do you regard him as a reputable
(17) researcher?
(18) A: Yes.
(19) Q: Do you consider him to be an expert in
(20) causation?
(21) MR. HEFTER: Objection.
(22) As it pertains to smoking and health?
(23) MR. BLEAKLEY: No.
(24) A: I am not sure what you mean by
(25)

2—14:38:21 25—14:39:32 Page 422
Krosnick
(1) causation.
(2) Q: Are you familiar with Donald Rubin's
(3) causal model?
(4) A: No.
(5) Q: Do you know that Donald Rubin is an
(6) expert witness in this case?
(7) A: No.
(8) Q: Counsel for Empire hasn't told you that
(9) Donald Rubin is testifying in this case on behalf
(10) of the defendants?
(11) A: That's correct, I have not heard that.
(12) Q: This is the first time you have heard
(13) that?
(14) A: That's correct.
(15) Q: So you don't know what his testimony is
(16) about, what the subject matter of his testimony is?
(17) A: That's correct.
(18) Q: Now I am going to turn to a completely
(19) new subject, relative risk.
(20) What is relative risk?
(21) A: Relative risk is the increase in a
(22) person's likelihood of contracting an illness, for
(23) example, as a result of having some other feature.
(24) Q: Is there a difference between relative
(25)

2-14:39:33 25-14:40:47

Page 423

Krosnick

(1)

(2) risk and absolute risk?

(3) A: The term "absolute risk" is not one that
(4) I am sure of a definition of, but if we defined it
(5) in terms of the probability of a person with a
(6) single feature contracting an illness, for example,
(7) then, yes, relative risk would certainly be
(8) different.

(9) Q: Explain for us the difference between
(10) relative risk and absolute risk as you have just
(11) defined it.

(12) A: Okay. So absolute risk would be
(13) calculated as the probability that a person with a
(14) particular characteristic — say, a cigarette
(15) smoker — will contract a particular illness, for
(16) example, let's say lung cancer. So there might be,
(17) for example, a 10 percent chance that a cigarette
(18) smoker will contract lung cancer during his or her

(19) life.
(20) Relative risk, on the other hand,
(21) compares that probability to the probability that
(22) people without the characteristic involved, that is
(23) nonsmokers, will contract the same illness. So it
(24) is the ratio of those two probabilities.

(25) Q: Which of those risks does a person need

2-14:40:49 25-14:41:48

Page 424

Krosnick

(1) to know in order to make a rational decision about
(2) whether to quit smoking or whether to take up
(3) smoking?

(4) MR. HEFTER: Objection.

(5) A: As we discussed last time, rational is a
(6) term that has behind it a great deal of contentious
(7) debate and no resolution about a definition that in
(8) my mind makes sense, so I can't answer questions
(9) about whether it would be a rational or an
(10) irrational decision, because many others have
(11) tried to define that in an adequate way and it just
(12) has not worked.

(13) Q: Let's change the question. Which of
(14) those risks does a person need to know in order to
(15) make a decision about whether to smoke or quit
(16) smoking or take up smoking?

(17) A: Now that brings us back to an issue we
(18) talked about before lunch, which was, am I in a
(19) position to make an assessment that any person
(20) needs any piece of information in order to make a
(21) decision, and my answer to that is I think people
(22) can and do make routinely make decisions frequently
(23) on the basis of varying amounts of information,
(24) sometimes none, sometimes a lot. That's a decision

2-14:41:50 25-14:42:53

Page 425

Krosnick

(1)

(2) that individuals make for themselves in terms of
(3) how much information they want before they make a
(4) decision and I don't personally see myself, as a
(5) social scientist, as being in a position to be
(6) prescriptive about how much information an
(7) individual needs or which kind of information an
(8) individual needs in order to make a decision.

(9) Perhaps by some legal standards we could
(10) arrive at a judgment about what people do and do
(11) not need to know and I can certainly make
(12) statements about accuracy or inaccuracy as
(13) pertaining to decisions, but I can't talk about
(14) whether a particular piece of information is
(15) required for a person to make a decision.

(16) Q: In your report, you conclude — and I
(17) think I am quoting directly — that the vast
(18) majority of American current and former smokers
(19) currently underestimate the increase in risk in
(20) getting lung cancer from smoking.

(21) Is that your opinion?

(22) A: Yes.

(23) Q: Which risk are we talking about here,
(24) absolute risk or relative risk?

(25) A: Relative risk.

2-14:42:54 25-14:44:10

Page 426

Krosnick

(1)

(2) Q: Why do you choose relative risk instead
(3) of absolute risk as the basis for this opinion?

(4) A: Well, because my opinion is based upon
(5) consideration of people's decision about what risks
(6) they bring to themselves as a result of smoking
(7) that would not have been there otherwise. In other
(8) words, the risk of lung cancer due to smoking needs
(9) to be characterized as the increase in a person's
(10) risk of contracting lung cancer due to smoking
(11) behavior, and so when defined in those terms, it
(12) demands discussion and measurement of relative
(13) risk.

(14) Q: Is it your opinion that when people are
(15) thinking about whether to quit smoking or not, what
(16) they want to know is what the relative risk is?

(17) MR. HEFTER: Objection.

(18) A: I have no basis for knowing what people
(19) do or do not want to know in making that decision.

(20) Q: Is it your opinion that when people make
(21) the decision to quit or not to quit, they do it
(22) based on the relative risk of smoking?

(23) A: I don't have an opinion one way or
(24) another about that.

(25) Q: Now, in your survey, your telephone

2-14:44:13 25-14:45:13 Page 427
Krosznick
(1) survey, you found that the average respondent
(2) believed that 43 percent of smokers get lung
(3) cancer, right?
(4) A: I wouldn't quite phrase it that way. I
(5) wouldn't talk about an average respondent. I would
(6) talk about the average of respondents was 43
(7) percent.
(8) Q: The average of respondents was 43
(9) percent of smokers get lung cancer, and, in fact,
(10) you know the number, is far less than that, right?
(11) A: I don't know that, actually. I am
(12) waiting to see whether a reliable number on that
(13) matter appears, but the numbers I have seen so far,
(14) I haven't been fully convinced are calculated in a
(15) way that I could have confidence in.
(16) Q: What numbers have you seen so far?
(17) A: I have seen the numbers that Professor
(18) Viscusi has offered in his publications.
(19) Q: Those are the only numbers you have seen
(20) of what percentage of people actually get lung
(21) cancer, who are smokers?
(22) A: I need to be careful here.
(23) In across the lifetime, yes, those are
(24) the only numbers I have seen. I have seen other

2-14:45:16 25-14:46:36 Page 428
Krosznick
(1) numbers about likelihood of getting lung cancer per
(2) year.
(3) Q: Here you, in developing your opinions in
(4) this case, in your research, made an effort to find
(5) out what percentage of the people who smoke
(6) throughout their lifetimes contract lung cancer?
(7) A: Not all people who smoke, but some
(8) people who smoke, yes.
(9) Q: In your survey, you found that the
(10) average of respondents believed that 19 percent of
(11) nonsmokers get lung cancer; is that right?
(12) A: Can I check that?
(13) Q: Sure.
(14) A: Yes.
(15) Q: And from that, you calculated a relative
(16) risk of 2-point-something percent?
(17) A: Not exactly. I mean, relative risk was
(18) actually calculated respondent by respondent, not
(19) based on the means.
(20) Q: Explain what you mean by that.
(21) A: In other words, I thought the
(22) implication of your question was did I divide 43 by
(23) 19 in order to get the mean for the sample. That
(24) isn't what I did.

2-14:46:39 25-14:47:33 Page 429
Krosznick
(1) Q: I got you.
(2) A: I did it individually for each
(3) respondent using his or her perception of smokers
(4) or nonsmokers and then averaged those figures
(5) across respondents.
(6) Q: Now, in your survey, did you ask this
(7) question, that is, what percentage of lifetime
(8) smokers get lung cancer? Did you ask that of
(9) nonsmokers, as well as smokers?
(10) A: I didn't ask that of anybody.
(11) Q: Did SRBI?
(12) A: They didn't ask it of anybody.
(13) Q: What did you ask them?
(14) A: A lot of things.
(15) Q: About what percentage of the people who
(16) smoke get lung cancer? What was the question?
(17) A: You said lifetime smokers. I didn't
(18) ask — we asked about people who smoked a pack a
(19) day for 20 years.
(20) Q: Were nonsmokers included? Were they
(21) asked that question as well?
(22) A: No, they were not.
(23) Q: Why not?
(24) A: I was told that this lawsuit is about

2-14:47:38 25-14:48:44 Page 430
Krosznick
(1) the perceptions of smokers and the health costs
(2) incurred by them, and so therefore, the focus of
(3) interest here was only current and former smokers.
(4) Q: Your survey did include former smokers,
(5) then?
(6) A: Yes, it did.
(7) Q: Why did you ask former smokers?
(8) A: Because I was told former smokers are of
(9) relevance to this case.
(10) Q: And your opinion that current and former
(11) smokers currently underestimate the increase in
(12) risks for getting lung cancer is based on the fact
(13) that the average of those respondents believed that
(14) 43 percent get lung cancer, the average of
(15) nonsmokers, the average respondent believed that
(16) nonsmokers was 19 percent, right?
(17) A: No.
(18) Q: You explain that, then.
(19) A: I am sorry, explain what?
(20) Q: You said no, that's not right? All
(21) right, let me start over again.
(22) Do you know how many people there are
(23) who have quit smoking in the United States over the
(24) last 35 or 40 years?

2—14:48:46 25—14:49:42

Page 431

Krosznick

A: No.

Q: You have seen no data on that at all?

A: I may have. I don't recall.

Q: Would you agree with me that it is

several million?

A: I have no basis for disagreeing.

Q: You have never seen any data that shows

how many people in this country have stopped

smoking since the Surgeon General's report in 1964?

A: I didn't say that.

Q: Have you?

A: I said I don't recall whether I have or

not.

Q: You have no recollection of seeing any

data that shows how many people in this country

have stopped smoking since 1964; is that right?

A: I don't have any specific recollection.

I may have seen it.

Q: Is it your opinion that all — I guess I

am going to have to ask you to make an assumption

for a second.

I want you to assume that the number is

50 million, okay?

A: Okay.

2—14:49:42 25—14:50:49

Page 432

Krosznick

Q: Is it your opinion that all 50 million

of those former smokers underestimated the risk of

getting lung cancer?

MR. HEFTER: Objection.

A: No.

Q: Is it your opinion that most of them

underestimated the risk of getting lung cancer?

MR. HEFTER: Objection.

A: Yes.

Q: Even though they quit?

A: Yes.

Q: Do you know why they quit?

A: Many research studies show that the

primary reason why people quit smoking is concern

about the health effects of smoking.

Q: So the research shows — and you have no

reason to agree with it —

A: I have a lot of reason to agree with it.

Q: No reason to disagree with it?

A: Right.

Q: So the research shows that most if not

all of the 50 million people who quit smoking quit

for health reasons. Nevertheless, most of them

underestimated the risk of smoking?

2—14:50:53 25—14:52:29

Page 433

Krosznick

[1]

MR. HEFTER: Objection.

A: Yes.

Q: Is that right, that is your opinion?

A: That would be my opinion, yes.

Q: If the absolute risk or baseline risk —

MR. BLEAKLEY: Strike that. Let me

start over again.

Q: Is it your opinion that knowledge of the

relative risk of risky behaviors is what people

need to know in order to make decisions?

MR. HEFTER: Objection.

A: As I said earlier, I am not in a

position to make any professional assessments of

what people do or do not need to know.

Q: Is it your opinion that people need to

know the relative risk of risk behaviors in order

not to underestimate those behaviors?

A: Yes.

Q: What if the absolute or baseline risk of

a risk behavior is minuscule, less than 100th of 1

percent? Is it your opinion that one still needs

to know the relative risk of that behavior in order

not to underestimate the risk?

MR. HEFTER: Objection.

2—14:52:32 25—14:54:30

Page 434

Krosznick

[1]

A: Yes.

Q: Did you do or have done any multivariate

analyses of your survey results to distinguish

between the effects on people's relative risk

perceptions?

MR. HEFTER: Objection.

A: Well, I am not sure what the question,

the latter part of the question means, but I can

tell you I have not done any multivariate analyses

of those data at all, so I don't know what that,

you know, what the — what it is you are asking

about specifically, but I can tell you no.

Q: Let's turn to your motivation to quit

index. I would like you to take a few moments to

describe what it is and why you did it.

A: Okay. As I understand it, one of the

questions in this case is whether, if tobacco

companies had acknowledged, beginning in the 1950s

what they knew at that time about the fact that

smoking cigarettes did, in fact, increase chances

of people acquiring particular undesirable health

conditions, that people would have smoked less in

this country, and part of the purpose of the

depositions was to explore that question and to

52434 5524

2—14:54:35 25—14:56:04 Page 435
Krosnick
(1) supplement the evidence coming from those
(2) depositions. I wanted to do an experiment that
(3) would test that hypothesis in a different way, and
(4) so the experiment was designed to be done in a
(5) survey, and in the context of a single survey
(6) interview, it's impossible to measure the dependent
(7) variable, we would call it, that is actually of
(8) interest here, which is smoking behavior.
(9) In other words, the goal of this
(10) experiment was to expose some people to certain
(11) messages under certain conditions from tobacco
(12) company employees and to observe the impact that
(13) that has, but we can't actually observe impact on
(14) smoking behavior during the course of a survey
(15) interview, so what I did was to draw on social
(16) psychological theory and an extensive body of
(17) research in psychology generally showing that
(18) behaviors such as smoking, and smoking in
(19) particular, are predicted very well by intentions,
(20) and intentions are predicted importantly by
(21) emotions, emotional reactions to the behaviors, and
(22) so what I wanted to do was to measure two
(23) constructs with these questions that I thought
(24) would be causes of smoking behavior, so in this

2—14:56:40 25—14:57:48 Page 436
Krosnick
(1) case, what I did was to measure those to quit,
(2) prediction of likelihood of quitting in the near
(3) future, and regret about smoking, based upon the
(4) implicit causal model that the more people regret
(5) smoking, the more they will intend to quit smoking,
(6) and the more they intend to quit smoking, the more
(7) they will, in fact, quit smoking, and so measuring
(8) emotions and intentions are the best approximations
(9) that can be implemented in the survey context to
(10) measure the dependent variable of interest.
(11) Q: On the basis of your motivation to quit
(12) index, did you reach any conclusions?
(13) A: Yes, I did.
(14) Q: What conclusions did you reach?
(15) A: I concluded that exposure to assertions
(16) that smoking causes serious health problems from
(17) the Surgeon General and tobacco company employees
(18) essentially simultaneously significantly enhances
(19) regret about smoking and desire to quit smoking,
(20) and from that, I made the inference that had people
(21) in America repeatedly heard during the 1960s that
(22) set of messages coming from those two sources
(23) essentially simultaneously — that is, the Surgeon
(24) General saying smoking causes lung cancer and other

2—14:57:52 25—14:59:21 Page 437
Krosnick
(1) serious health problems and tobacco companies
(2) making those same assertions — that people would
(3) have smoked less.
(4) Q: So it is your opinion, based on this
(5) motivation to quit index, is that if the tobacco
(6) industry had made statements that smoking causes
(7) disease, there would be less smoking?
(8) A: There would have been less smoking, yes.
(9) Q: There would have been less smoking,
(10) fewer smokers, fewer cigarettes, both, which?
(11) A: Either or both.
(12) Q: Is it your opinion that there are people
(13) who would have quit who didn't quit but would have
(14) quit if the tobacco industry had made these
(15) statements?
(16) MR. HEFTER: Can I hear that read back?
(17) (Record read.)
(18) A: Yes.
(19) Q: It took you a long time to answer that.
(20) Why?
(21) MR. HEFTER: He was thinking.
(22) A: I just wanted to think it through
(23) carefully.
(24) Q: And that's your opinion in this case?

2—14:59:22 25—15:01:18 Page 438
Krosnick
(1) A: Yes.
(2) Q: Is it your opinion that there are people
(3) who would not have taken up smoking in the first
(4) place if these tobacco industry statements about
(5) smoking had been made?
(6) A: I am less certain of that, because I
(7) don't have data on nonsmokers and the impact of
(8) this message on nonsmokers.
(9) Q: Does the fact that you are less certain
(10) mean that you are not prepared to offer an opinion
(11) to a reasonable degree of scientific certainty?
(12) A: Correct.
(13) Q: So you are not going to offer the
(14) opinion in this case that the motivation-to-quit
(15) analysis and index you did would have affected
(16) smoking initiation rates?
(17) A: I can't — I am not sure I can say now
(18) definitively that —
(19) Q: We are entitled to know.
(20) A: I mean, I have no plans to know. I am
(21) just saying I may have —
(22) Q: Speak now or forever hold your peace.
(23) MR. HEFTER: I don't think that is
(24) exactly the standard, but —

3-15:01:22 25-15:03:14

Page 439

Krosnick

(1) A: If I get to that point, I will let you
(2) know.
(3) MR. BLEAKLEY: Pretty close.
(4) Q: You have no intention at this time of
(5) offering such an opinion, correct?
(6) A: That's correct.
(7) Q: Because you are not certain about it?
(8) A: Well, no, you —
(9) MR. HEFTER: Objection.
(10) A: — you asked me on the basis of the
(11) motivation-to-quit analysis.
(12) Q: Yes, that's right.
(13) A: Right.
(14) Q: Now, is there any basis other than your
(15) motivation-to-quit analysis that forms the basis
(16) for your opinion that people would have smoked less
(17) if the tobacco industry had made these statements?
(18) MR. HEFTER: Can I hear that again,
(19) please.
(20) (Record read.)
(21) MR. HEFTER: Objection.
(22) A: There is evidence in the depositions
(23) themselves consistent with the claim that if
(24) tobacco companies had made these assertions, people

3-15:03:18 25-15:04:54

Page 440

Krosnick

(1) would have been less likely to begin smoking.
(2) There is evidence in the literature on the causes
(3) of smoking in children, especially, consistent with
(4) the idea that if tobacco companies had made these
(5) statements, there would have been less onset of
(6) smoking.
(7) That's all of the evidence I can think
(8) of.
(9) Q: What evidence in the literature is there
(10) of the fact that such statements made by the
(11) tobacco industry would affect the onset of smoking
(12) in children? Please identify for us every article
(13) or scientific study that has been conducted that
(14) you can name.
(15) A: The ones that I know are all listed in
(16) my report and these are — and you have to — there
(17) are studies of different kinds, but the crucial
(18) ones here are studies documenting that beliefs
(19) about the health consequences of smoking have been
(20) changing during recent decades, and so 40, 50 years
(21) ago, approximately half of Americans believed that
(22) smoking was not dangerous, and that was true for
(23) children as well.
(24) Furthermore, there is evidence that

2-15:04:56 25-15:06:13

Page 441

Krosnick

(1) children who believe health consequences,
(2) undesirable health consequences of smoking, follow
(3) from smoking, are less likely to start smoking
(4) because of those beliefs, and furthermore, there is
(5) evidence indicating that the Surgeon General's
(6) warnings to the public about, and other statements
(7) to the public about the health consequences of
(8) smoking were persuasive and did, in fact, alter
(9) people's beliefs about the health consequences of
(10) smoking and altered smoking onset rates as well as
(11) quitting rates, and there is evidence from the
(12) attitude change literature that clearly indicates
(13) if tobacco companies had made those assertions,
(14) they would have been more convincing for the
(15) American public than when the Surgeon General made
(16) those assertions, and so by bringing together those
(17) four sets of literature, I think it's quite
(18) reasonable to conclude that had tobacco companies
(19) made those statements, which would have been
(20) received as especially credible, and being more
(21) persuasive than the Surgeon General, that would
(22) have led more children, young adults and older
(23) adults to recognize the health consequences of
(24) smoking earlier, and that recognition would then

2-15:06:15 25-15:07:46

Page 442

Krosnick

(1) have led to less smoking onset.
(2) Q: Did I hear you say that statements by
(3) the tobacco industry would be even more persuasive
(4) than statements made by the public health
(5) community?
(6) A: No, I said by the Surgeon General.
(7) Q: Statements made by the tobacco industry
(8) would be even more persuasive than statements made
(9) by the Surgeon General?
(10) A: That's correct.
(11) MR. BLEAKLEY: Let's change the tape and
(12) pursue that.
(13) THE VIDEOGRAPHER: The time is 3:07
(14) p.m. This completes tape number 2 of the
(15) videotaped deposition of Jon Krosnick.
(16) (Discussion off the record.)
(17) THE VIDEOGRAPHER: The time is 3:08 p.m.
(18) and this is tape number 3 of the videotaped
(19) deposition of Dr. Jon Krosnick.
(20) BY MR. BLEAKLEY:
(21) Q: Before we changed the tape, you said
(22) that there is evidence that statements made by the
(23) tobacco industry would be even more persuasive than
(24) statements made by the Surgeon General. And when I

2—15:07:51 25—15:09:09 Page 443
Krosnick
(1) used the term public health community, you excluded
(2) that, you said, no, I meant the Surgeon General.
(3) A: No, I didn't use those words, so I just
(4) wanted to clarify I said —
(5) Q: How have statements made by the
(6) defendants, by the tobacco industry been more
(7) persuasive than statements made by the Surgeon
(8) General?
(9) A: Well, literature on persuasion in social
(10) psychology has quite extensively for a long time
(11) studied how characteristics of the source of a
(12) message influence how much people's attitudes and
(13) beliefs change in response to hearing that message,
(14) and one of the findings in that literature is that
(15) when a source makes an assertion that works against
(16) his or her self-interest or their self-interest,
(17) that people find that assertion to be especially
(18) convincing and especially likely to be true,
(19) because certainly there is no ulterior motive for
(20) the source to be expressing it if expressing it
(21) actually hurts the source in some way, whereas
(22) when — it turns out there actually is research
(23) done on reactions to the Surgeon General's
(24) report — I should say the advisory committee to

2—15:09:12 25—15:10:29 Page 444
Krosnick
(1) the Surgeon General published in 1964 indicating
(2) that at that time not all Americans believed that
(3) the Surgeon General was completely impartial in
(4) this, and actually, there was some skepticism about
(5) whether the Surgeon General might be overly worried
(6) about health issues and overly alarmist about the
(7) consequences of smoking. That concern would not be
(8) relevant if the tobacco industry had made the same
(9) assertions because it would be hard to imagine
(10) that the tobacco industry would make a statement
(11) against their own self-interest unless it had
(12) validity, this research suggests.
(13) Q: Is it your expert opinion that there was
(14) a period of time in which a significant number of
(15) the American people believed that the Surgeon
(16) General was overly concerned about smoking and
(17) health?
(18) MR. HEFTER: Objection.
(19) A: No.
(20) Q: Do you think this is true today?
(21) A: What is true today?
(22) Q: That statements made by the tobacco
(23) industry are even more persuasive than statements
(24) made by the Surgeon General?

2—15:10:29 25—15:11:39 Page 445
Krosnick
(1) MR. HEFTER: Objection.
(2) A: I am less certain about that.
(3) Q: Why? Why would there be a difference?
(4) A: Well, of course, during the last year,
(5) the tobacco industry has, in fact, made these
(6) assertions in public, and there is a new
(7) explanation that was presented to the public very
(8) vividly at the time that these assertions were
(9) made. That is, that the tobacco industry saw
(10) itself, I believe, in Florida, as in serious danger
(11) of losing a very large scale lawsuit after having
(12) already settled with states' attorneys general
(13) across the U.S. and revolutionary changes in
(14) acknowledgements about tobaccos, risks and
(15) responsibility of tobacco companies, and so there
(16) was at that time widely publicized the notion that
(17) tobacco companies were changing what they were
(18) saying, not necessarily because they genuinely
(19) changed their beliefs about the matter, but rather
(20) because it was an opportunistic thing to do to
(21) minimize financial liability, and if that was
(22) presented in the context of ongoing lawsuits may
(23) have altered this sequence.
(24) Q: What do you mean, may have altered this

2—15:11:41 25—15:12:37 Page 446
Krosnick
(1) sequence?
(2) A: That people may not have been as
(3) convinced by those assertions if viewed in
(4) isolation.
(5) Q: Let me make sure I understand this.
(6) What you are saying is that if the
(7) tobacco industry had said, let us say, in 1964,
(8) that cigarette smoking causes lung cancer, it would
(9) have been even more persuasive than the Surgeon
(10) General saying it, because it was against their
(11) self-interest?
(12) A: That's correct.
(13) Q: But you are not at all sure that the
(14) acknowledgements that the tobacco industry has made
(15) in the last year or two have had any such effect
(16) because they were done as a part of lawsuits?
(17) A: No, I didn't say they would not have any
(18) such effect. I am saying they would not
(19) necessarily have as strong an effect.
(20) Q: Do you have any empirical evidence to
(21) support that or is that just a suspicion?
(22) A: That is just a suspicion, yes.
(23) Q: So this is not something you will
(24) testify to as an expert to a reasonable degree of

2-15:12:39 25-15:13:30

Page 447

Krosnick

scientific certainty?

MR. HEFTER: Objection.

A: I can't make statements about what I will or will not testify to in this case.

Q: Do you hold that to a reasonable degree of scientific certainty?

MR. HEFTER: Define what "that" is.

Q: That statements made in the past year have not had and will not have a significant impact on people's quitting.

A: I definitely would not make that assertion.

Q: Or that it would be even more — that these statements have been more persuasive than statements made by the Surgeon General.

MR. HEFTER: The ones in the past year?

MR. BLEAKLEY: Yes.

A: I am less clear about that.

Q: I am only asking if you have an expert opinion.

A: I am trying to understand an opinion about what.

Are we comparing recent tobacco industry statements to which statements by the Surgeon

2-15:13:33 25-15:14:25

Page 448

Krosnick

General made when?

MR. BLEAKLEY: I will strike the question.

Q: Do you have an opinion whether the statements that have been made by the tobacco industry in the last year or two were motivated primarily by litigation?

A: No.

Q: You don't have an opinion one way or the other?

A: No.

Q: Now, when you said that statements made by the tobacco industry would be even more persuasive than statements made by the Surgeon General, are you talking about statements made by the Surgeon General of the United States only?

A: Yes. When I am talking about the Surgeon General, I am talking about the Surgeon General.

Q: What about statements made by the American Cancer Society, did you take those into account?

A: Into account when, in what?

Q: Did you take those into account in

2-15:14:27 25-15:15:38

Page 449

Krosnick

(1) reaching the opinion that statements made by the tobacco industry would have more impact than statements made by the Surgeon General, or is your opinion limited only to a comparison between statements made by the tobacco industry and statements made by the attorney general?

MR. HEFTER: Surgeon General?

Q: Surgeon General.

A: My statement is about the relative persuasiveness of statements made by tobacco industry employees versus statements made by the Surgeon General. In making that statement, I took into account the fact that other organizations, including public health organizations, made similar statements.

Q: Did your motivation-to-quit analysis take into account statements made by public health organizations other than the Surgeon General?

A: By motivation-to-quit analysis, you are referring to what I did in the SRBI survey?

Q: In part, yes.

A: Okay. What else is included?

Q: Did it?

A: There is no mention in that survey of

2-15:15:40 25-15:16:43

Page 450

Krosnick

(1) other sources of information, but answers that people gave in that survey may have been influenced by statements made by other sources of information.

Q: Your motivation-to-quit analysis, as I understand it, and you correct me if I am wrong, talks about statements made by the Surgeon General of the United States. It does not talk about statements made by other public health organizations about smoking and health; is that right?

A: Well, an analysis doesn't talk about something, but if what you are asking is did the survey respondents in the SRBI survey hear quotes from anybody other than the Surgeon General and tobacco industry employees, the answer is no.

Q: You know, however, that there are such statements, do you not?

A: What statements?

Q: Statements about smoking and health made by public health organizations other than the Surgeon General of the United States.

A: Yes.

Q: Have you made any kind of systematic review or analysis of the efforts of the public

2-15:16:47 25-15:18:41 Page 451
Krosnick
(1) health community other than the Surgeon General to
(2) discourage smoking in this country?
(3) A: To some degree, yes.
(4) Q: Did you not consider that important in
(5) conducting your motivation-to-quit analysis?
(6) A: That's correct.
(7) Q: You did not think it important for there
(8) to be a fair and accurate comparison of the
(9) statements made by the tobacco industry versus the
(10) statements made by the public health community?
(11) MR. HEFTER: Objection.
(12) A: I believe that there was a fair
(13) comparison in the study. I am, of course,
(14) concerned about fair comparisons and did a great
(15) deal to make the comparisons in a study fair, but
(16) the questionnaire did not involve the mention of
(17) any other public health organizations besides the
(18) Surgeon General.
(19) Q: Why not?
(20) A: The interest that I had in this study
(21) was in looking at the impact of statements by
(22) tobacco companies on current and former smokers'
(23) regard about smoking and desire to quit in two
(24) contexts. One, when these statements are

2-15:18:44 25-15:20:04 Page 452
Krosnick
(1) encountered in relative isolation, that is, hearing
(2) only statements from tobacco executives, as
(3) essentially happened for a chunk of the American
(4) public in 2000 who read the newspaper and heard
(5) about these admissions as they were made, or in the
(6) context of identical assertions made by a credible
(7) public health authority, and so I chose the Surgeon
(8) General as that public health authority and view
(9) that the Surgeon General, in the context of this
(10) experiment, as representative of credible public
(11) health authorities.
(12) In other words, I believe that if
(13) quotes, for example, from the American Cancer
(14) Society had been inserted into this experiment in
(15) place of the quotes from the Surgeon General that
(16) were used, that comparable results or even more
(17) persuasive results would have been obtained with
(18) regard to the conclusions that I reached.
(19) Q: But you don't know that?
(20) A: That's correct.
(21) Q: What if you had included in your
(22) analysis statements made by the American Cancer
(23) Society in addition, not in place of, the
(24) statements made by the Surgeon General? What

2-15:20:11 25-15:21:07 Page 453
Krosnick
(1) impact would that have had on your
(2) motivation-to-quit analysis?
(3) A: We would have to say in addition for
(4) whom.
(5) Q: How many statements by the Surgeon
(6) General were shown to the respondents in your
(7) survey?
(8) A: Well, nothing was shown to the
(9) respondents in the survey. They heard them over
(10) the phone. There were two groups of respondents
(11) who heard statements by the Surgeon General.
(12) Q: How many Surgeon General statements were
(13) heard by the respondents?
(14) A: For half of the respondents, zero, and
(15) for the other half, three.
(16) Q: Three. Let's assume that instead of
(17) three, you had heard three from the Surgeon
(18) General, three from the American Cancer Society,
(19) three from textbooks that the survey respondents
(20) read and learned about, when they were in school,
(21) three from the American Heart Association, three
(22) from the American Lung Association, three from the
(23) World Health Organization.
(24) What effect, if any, do you think it

2-15:21:09 25-15:22:30 Page 454
Krosnick
(1) would have had on your motivation-to-quit analysis?
(2) MR. HEFTER: Objection.
(3) A: I think it would have reversed the
(4) effects.
(5) Q: Let me ask you a little bit about the
(6) methodology in the motivation-to-quit analysis.
(7) Is this — I am not going to be using
(8) the right term, but is this an accepted format or
(9) methodology, is it something that's found in the
(10) literature, how to do this kind of thing?
(11) A: I am sorry, how to do what?
(12) Q: The motivation-to-quit analysis, the
(13) motivation-to-quit index.
(14) A: Everything about that experiment is
(15) standard practice and has been published dozens of
(16) times in reputable journals.
(17) Q: What journals, for example?
(18) A: American Political Science Review,
(19) American Journal of Political Science, The Journal
(20) of Personality and Social Psychology, The Journal
(21) of Experimental Social Psychology, Public Opinion
(22) Quarterly and others.
(23) Q: Whose idea was it to do this
(24) motivation-to-quit analysis?

2-15:22:32 25-15:23:40

Page 455

Krosnick

[1] A: Mine.
[2] Q: You weren't asked to do it by counsel
[3] for Empire?
[4] A: That's correct.
[5] Q: I am sure you discussed it with counsel,
[6] however.
[7] A: Yes.
[8] Q: Did you think about or talk about doing
[9] an analysis of whether or not fewer people would
[10] have smoked if defendants had said nothing about
[11] smoking and health?
[12] MR. HEFTER: Objection.
[13] A: I think I understand what you are
[14] asking. You are saying nothing instead of what the
[15] tobacco industry did say, which was there is not
[16] evidence which is conclusive.
[17] Q: Correct.
[18] A: I am sorry, one more time?
[19] Q: Did you think about doing a study that
[20] analyzed whether or not people would have smoked
[21] less if the tobacco industry said nothing instead
[22] of what they said?
[23] A: I see.
[24] MR. HEFTER: Objection.

2-15:23:40 25-15:25:45

Page 456

Krosnick

[1] Mischaracterizes the report.
[2] A: No.
[3] Q: One of the questions that you asked in
[4] your motivation-to-quit analysis was when you think
[5] about your smoking in the past, does that make you
[6] feel unhappy or does that not make you feel
[7] unhappy?
[8] A: I don't think that's exactly the
[9] wording. Should we check it or —
[10] Q: Sure.
[11] A: You are missing a couple of words there.
[12] Do you want me to read it to you —
[13] Q: I will read it to you.
[14] "When you think about having smoked
[15] cigarettes in the past, does that make you feel
[16] unhappy at all or does it not make you feel
[17] unhappy?"
[18] All right?
[19] A: Yes.
[20] Q: Anything wrong with that question?
[21] A: Wrong? I am not sure what you mean by
[22] "wrong," but —
[23] Q: Does it violate or does it implicate the
[24] social desirability bias?

2-15:25:48 25-15:26:55

Page 457

Krosnick

[1] A: As I answered earlier, I don't believe
[2] that I or other researchers are in a position,
[3] without empirical tests, to determine whether or
[4] not an item is or is not susceptible to that simply
[5] by looking at it.
[6] Q: So you have no opinion one way or the
[7] other about that?
[8] A: That's correct.
[9] Q: Is it suggestive?
[10] A: No.
[11] Q: Is it leading?
[12] A: No.
[13] Q: Does it implicate the self-deception
[14] bias?
[15] A: I don't know of any research which has
[16] ever tried to assess that issue directly, so I
[17] wouldn't know how — I certainly wouldn't know how
[18] to assess it by looking at it on the surface.
[19] Q: Is it a question that will result in a
[20] certain number of people answering the question
[21] that they are unhappy without even thinking about
[22] the second part of the question?
[23] A: The way interviewers read questions over
[24] the telephone, they typically read directly through

2-15:27:02 25-15:28:22

Page 458

Krosnick

[1] the question and so respondents very rarely, for a
[2] question like this, will interrupt before the
[3] question is out, so I think it is very unlikely.
[4] Q: Does unhappy, the word "unhappy," have
[5] the same meaning for everybody?
[6] A: No.
[7] Q: It is a qualitative response, isn't it?
[8] A: It is a word that, just like every other
[9] word, has multiple interpretations, and survey
[10] respondents interpret words with different
[11] meanings, just as we all do.
[12] Q: But when I say it makes me unhappy, it
[13] may be something very different from what you say
[14] makes you unhappy.
[15] A: Probably not very different, but maybe
[16] somewhat different.
[17] Q: But in your opinion, this question is
[18] not suggestive or leading?
[19] A: Correct.
[20] Q: Did you calculate a motivation-to-quit
[21] index for former smokers?
[22] A: No, because they have quit already.
[23] Q: There would be no need and no sense in
[24] conducting and calculating a motivation-to-quit

2—15:28:27 25—15:29:42 Page 459
Krosnick
[1] index for people who have already been sufficiently
[2] motivated to quit, right?
[3] A: Well, that's not exactly true. This
[4] survey for those individuals measured regret about
[5] smoking. You couldn't measure desire to quit in
[6] the future because they are not smoking now. You
[7] could measure desire to not smoke in the future,
[8] and that's what we did.
[9] So I guess, just to be clear, I think
[10] you are using the term "motivation to quit" as it
[11] was used in here as a kind of mnemonic to describe
[12] the index, and former smokers are included in the
[13] analysis using that index. It's just the index is
[14] based on only two questions.
[15] Q: Why are they included in the analysis?
[16] A: Because their beliefs about smoking are
[17] relevant to conclusions.
[18] Q: Why?
[19] A: It is interesting to see the extent to
[20] which these individuals' beliefs about their
[21] smoking are influenced by statements by the tobacco
[22] industry, because they could always start smoking
[23] again, and so here we are looking at, in a sense,
[24] beliefs that would be regulators or preventers

2—15:29:47 25—15:30:27 Page 460
Krosnick
[1] from the initiation of smoking, and that's,
[2] therefore, very much of relevance to this case.
[3] Q: What do you think the likelihood is that
[4] any substantial number of former smokers would say
[5] they didn't regret their smoking habit when they
[6] smoked?
[7] MR. HEFTER: Objection.
[8] A: I know the answer to that because this
[9] survey asked former smokers if they regretted
[10] having smoked.
[11] Q: What was the point of asking them?
[12] A: To build this index.
[13] Q: You didn't just know they regretted it?
[14] A: I didn't, and it turns out that some of
[15] them don't regret it.
[16] Q: Did you ask former smokers if they had
[17] any intention of restarting?
[18] A: No.
[19] Q: Did you ask them any questions designed
[20] to elicit whether or not they were giving any
[21] consideration whatsoever to restarting smoking?
[22] A: Not directly.
[23] Q: Did you indirectly?
[24] A: I believe that these questions about

2—15:30:49 25—15:32:08 Page 461
Krosnick
[1] regret of smoking and unhappiness are likely to be
[2] precursors to determinants of whether former
[3] smokers would consider and initiate smoking again.
[4] Q: And that's what makes it relevant to
[5] your motivation-to-quit analysis?
[6] A: That's correct.
[7] Q: I am having some difficulty in
[8] understanding how it's appropriate to ask some
[9] people two questions, some people three questions,
[10] some people four questions, and to lump it
[11] altogether.
[12] How do you justify that?
[13] A: I guess I would answer that in two ways.
[14] One is that I have done analyses that you have that
[15] do not lump them together and that analyze the two
[16] groups separately, and the two groups yield the
[17] same results, one group with the dependent variable
[18] based on four measures, the other group with the
[19] dependent variable based on two measures, and in
[20] light of that, the most parsimonious way to present
[21] the results, given there is not a strong indication
[22] for them to vary anyhow, is to combine the two
[23] groups together.
[24] Now, the logic is these are four

2—15:32:13 25—15:33:16 Page 462
Krosnick
[1] measures all on the same scale, ranging from 1 to
[2] 5, where 1 is the most regret and greatest
[3] likelihood of quitting and 5 is the least regret,
[4] least likelihood of quitting, and in order to put
[5] people on that continuum, I did it with two
[6] questions for former smokers and added the two
[7] additional questions for current smokers because I
[8] could reasonably ask those people those questions,
[9] they would be meaningful for them, and asking those
[10] two additional questions would enhance the quality
[11] of the measurement of the variable that I cared
[12] about for that group, and unfortunately, I couldn't
[13] ask those comparable questions of people who had
[14] already quit, and so I accepted less measurement
[15] precision in that case.
[16] As it turns out, the reduction in
[17] measurement precision did not compromise the
[18] design's ability to detect statistically
[19] significant effects of manipulation.
[20] Q: Did you calculate a motivation-to-quit
[21] index just for current smokers?
[22] A: Yes.
[23] Q: What were the results?
[24] A: You have them, they are —

2-15:33:17 25-15:34:34

Page 463

Krosznick

(1)

(2) Q: You tell me.

(3) A: It shows the same results that we have
(4) seen here.

(5) Q: Now, as I understand it, you had four
(6) groups here, one you called your control group,
(7) people who were exposed to nothing, right?

(8) A: Well, no quotes, right.

(9) Q: The so-called Surgeon General group or
(10) SG group that were exposed to the three Surgeon
(11) General statements; the tobacco group, you called
(12) it tobacco group, and the group in which you asked
(13) the two, the combined group together.

(14) Let me go back for a moment. Is the
(15) analysis, the smoker-only analysis, the calculation
(16) of the motivation-to-quit index for smokers, is
(17) that what we just got here during the lunch break?

(18) A: No. You had this since the very first
(19) delivery of materials from me a long time ago.

(20) Q: Explain to us why you combined the
(21) control and Surgeon General group. What is the
(22) point of doing them separately if you were going to
(23) end up controlling them? Combining them, I mean.

(24) A: The first analysis that I did was to
(25) look at whether hearing these quotes from the

2-15:34:37 25-15:35:57

Page 464

Krosznick

(1) Surgeon General alone enhanced the
(2) motivation-to-quit index as compared to the control
(3) group. To me, that — I did not expect to find a
(4) difference there because the Surgeon General's
(5) comments and opinions and even some of these quotes
(6) have been very, very widely publicized. Indeed,
(7) one of the quotes has been on many cigarette
(8) packages, so these current and former smokers had
(9) seen them many times. So the idea that new
(10) exposure to those quotes yet again in the survey
(11) would alter people's beliefs seemed very unlikely
(12) to me, so I began by testing that difference, and
(13) as expected, that difference was not statistically
(14) significant.

(15) In other words, I viewed those two
(16) groups as essentially being comparable, that the
(17) manipulation I did to one did not produce an effect
(18) that was reliable. Therefore, those two groups
(19) essentially come from the same population, and it's
(20) reasonable to combine the two of them together in
(21) order to produce the highest statistical power that
(22) one can obtain in moving forward with other
(23) comparisons.

(24) Now, let me also mention that I have,

2-15:36:00 25-15:37:02

Page 465

Krosznick

(1)

(2) since my original report, and in the materials you
(3) were given today, done this analysis differently,
(4) where I didn't combine those two groups and simply
(5) compared the control group to each of the other
(6) groups, and in that context compared the control
(7) group to the SGTB group, that is the fourth group
(8) that heard all six quotes, and the difference
(9) between those two groups is, again, highly
(10) statistically significant in that analysis.

(11) Q: The difference between which groups?

(12) A: The control group and the SGTB group,
(13) who heard all six quotes.

(14) In other words, the same conclusion is
(15) reached, regardless of whether we combine the first
(16) two groups to compare with the fourth or simply
(17) keep them separate.

(18) Q: Let me ask you this: Why did you do the
(19) control group and the Surgeon General group
(20) separately if your assumption all along was that
(21) there basically wasn't any difference between the
(22) two?

(23) A: It was my expectation that there would
(24) not be a difference between the two, but that
(25) wasn't an assumption that I made, it was an

2-15:37:05 25-15:38:09

Page 466

Krosznick

(1)

(2) expectation and I wanted to test that expectation.

(3) Q: And your testimony is that this new
(4) analysis which was provided to us at 1:20 this
(5) afternoon —

(6) MR. WILLIAMS: 2:20.

(7) Q: — 2:20 this afternoon —

(8) MR. HEFTER: So stipulated.

(9) Q: — makes a comparison between the
(10) control group and the Surgeon General group or is
(11) it the control group and the tobacco group and the
(12) control group and the SGTB group, which?

(13) A: All.

(14) Q: All of them, and you find a statistical
(15) significance between all three, in all three cases?

(16) A: It is all done in the context of a
(17) single analysis of variance, the analysis of
(18) variance shows overall a statistically significant
(19) effect of the manipulation, and furthermore, that
(20) is followed up by what you might call pairwise
(21) comparisons among the conditions, and what it shows
(22) is the first condition, mean motivation-to-quit
(23) index score, is significantly different from the
(24) fourth condition, mean motivation to quit score.

(25) Q: Did you make a separate analysis either

2—15:38:11 25—15:39:05

Page 467

Krosnick

(1) before or in the materials that you gave us today
(2) to see whether there was a statistical —
(3) statistically significant difference between the
(4) Surgeon General group and the tobacco group?
(5) A: Yes.
(6) Q: And what was the answer?
(7) A: There is no — the difference between
(8) those conditions is not statistically significant.
(9) Q: Did you do that before today or today?
(10) A: Before today.
(11) Q: Did you, before today, make an analysis
(12) of the difference between the Surgeon General group
(13) and the SGTB group?
(14) A: Yes.
(15) Q: What did you find?
(16) A: Those groups are not statistically
(17) significantly different from one another.
(18) Q: Did you make an analysis of the
(19) difference between the tobacco group and the SGTB
(20) group?
(21) A: Yes. Those groups are not statistically
(22) significantly different from one another.
(23) Q: Why isn't the appropriate comparison
(24) between the Surgeon General group and the SGTB

2—15:39:08 25—15:40:00

Page 468

Krosnick

(1) group, for purposes of the opinions that you are
(2) rendering in this case, why isn't that the right
(3) analysis?
(4) A: Well, they are — I would say there is
(5) no such thing as a right analysis or a wrong
(6) analysis. There are different analyses which are
(7) potentially informative, and what I — the reason
(8) that I would prefer, find more valuable and
(9) persuasive, an analysis that combined the first two
(10) groups together comes from two points of view. One
(11) is that I talked in with expectations believing
(12) that the Surgeon General's messages were widely
(13) publicized, there would be no news there, that
(14) there would not a difference between those two
(15) conditions that was obtained, and in addition, one
(16) always wants to have maximum statistical power in
(17) doing any analysis because there is always the
(18) potential that a real difference is present in an
(19) experiment, for example, like this, but one does
(20) not have sufficient power to detect it. Therefore,
(21) the larger the sample, as long as the sample is
(22) collected according to sensible, prescribed
(23) principles, holding everything else constant,
(24) larger sample yields more statistical power to

2—15:40:21 25—15:41:47

Page 469

Krosnick

(1) accurately conclude whether an effect is or is not
(2) present in an experiment, and so therefore, in a
(3) context in which there was strong theory in advance
(4) suggesting these two groups would be identical, and
(5) evidence that, in fact, they were not reliably
(6) different, it enhances statistical power and the
(7) chances of accuracy of detecting an effect to
(8) combine them in a comparison with the fourth group.
(9) Q: Was the goal of this experiment to
(10) compare the actual world to a hypothetical world
(11) where the tobacco company made these statements
(12) about smoking and health?
(13) A: No.
(14) Q: I guess what I am having difficulty
(15) understanding is the hypothesis that you were
(16) testing or the, what you wanted to find out here
(17) was if the tobacco companies years ago had said
(18) smoking causes disease, would that have reduced
(19) smoking, right?
(20) A: Yes.
(21) Q: Now, isn't the proper way, assuming that
(22) this motivation-to-quit kind of analysis has any
(23) validity to it at all, isn't the proper way to do
(24) that to compare what people actually heard, which

2—15:41:51 25—15:43:01

Page 470

Krosnick

(1) is the Surgeon General's statements, according to
(2) what you have just said, with the world in which
(3) they heard that and the tobacco industry
(4) statements?
(5) MR. HEFTER: Objection.
(6) A: I am sorry, I am having a little trouble
(7) concentrating with the distraction. Can we wait
(8) until you are done?
(9) Q: If the purpose of this experiment was to
(10) determine, if possible, whether statements made by
(11) the tobacco industry that smoking causes disease
(12) years ago would have impacted on the amount of
(13) smoking, would have reduced smoking, isn't the
(14) proper way to do that to compare what people really
(15) heard, which is the Surgeon General's statements,
(16) right?
(17) MR. HEFTER: And your clients' own
(18) statements as well.
(19) MR. BLEAKLEY: No. I will ask the
(20) questions. When your turn comes, you can
(21) ask your question.
(22) MR. HEFTER: I object to the unfair
(23) hypothetical.
(24) Q: — to ask what they heard from the

2-15:43:05 25-15:44:07

Page 471

(1) *Krosnick*

(2) Surgeon General and compare it to what they heard
(3) from the Surgeon General and the tobacco companies.

(4) MR. HEFTER: Objection

(5) A: That would not be my opinion, no.

(6) Q: So the fact that there was no
(7) statistical significance, statistically significant
(8) difference between the Surgeon General group and
(9) the SGTB group is irrelevant to you?

(10) MR. HEFTER: Objection.

(11) A: It is not irrelevant to me.

(12) Q: Isn't it a fact that if you — when you
(13) don't combine the control group and the Surgeon
(14) General group, the study yields no statistically
(15) significant differences?

(16) A: That is not true.

(17) Q: But you do agree with me there is no
(18) statistically significant difference between the SG
(19) group and the TB group, right?

(20) A: That's correct.

(21) Q: And there is no statistically
(22) significant difference between the SG group and the
(23) SGTB group?

(24) A: That's right.

(25) Q: And there is no statistical difference

2-15:44:09 25-15:45:27

Page 472

(1) *Krosnick*

(2) between the TB and the SGTB groups?

(3) A: That's correct.

(4) Q: It is only when you combine the control
(5) group and the Surgeon General group and make the
(6) comparison that you find a statistically
(7) significant difference, right?

(8) A: That is not true.

(9) Q: In fact, are the SG and TB groups
(10) identical in terms of the statistical significance?

(11) A: Aren't they the same, there is no difference at

(12) all? There is not just not a statistically
(13) significant difference, there is no difference?

(14) MR. HEFTER: Objection.

(15) A: That is not true.

(16) Q: If you wanted more statistical power, I
(17) think was the term you used, why didn't you simply
(18) have the control group hear the three Surgeon
(19) General statements, too?

(20) A: Hearing statements would have nothing to
(21) do with statistical power.

(22) Q: The three statements made by the Surgeon
(23) General, these are the three statements made in the
(24) real world, aren't they?

(25) A: They are three of the statements that

2-15:45:28 25-15:46:39

Page 473

(1) *Krosnick*

(2) the Surgeon General has, in fact, made.

(3) Q: That's right. There are more, but you
(4) only exposed the respondents to three?

(5) A: Yes.

(6) Q: They were made in the real world. Why
(7) isn't the Surgeon General group therefore the
(8) proper group to compare to the SGTB group? Would
(9) you explain that for us?

(10) A: Yes. I answered that once before. I am
(11) happy to answer it again.

(12) Q: You said there wasn't, but you didn't
(13) tell us why.

(14) A: I thought I had. I will try to.

(15) So the question here is does hearing
(16) information from one source alone produce attitude
(17) change or belief change or regret change or
(18) intention to quit change and does hearing
(19) information from two sources with different
(20) motivations simultaneously produce attitude change,
(21) belief change, regret change, intent change, and so
(22) the design of this experiment is tailored to that
(23) question.

(24) In other words, some respondents, the
(25) control respondents are exposed to nothing. Others

2-15:46:42 25-15:47:53

Page 474

(1) *Krosnick*

(2) are exposed to quotes only from one source, still
(3) others are exposed to quotes from two sources
(4) simultaneously, and my interest was in
(5) understanding the synergy that occurs when
(6) respondents hear quotes from two different
(7) sources — in this case, the Surgeon General and
(8) tobacco companies simultaneously — and so
(9) comparisons of relevance to answering that question
(10) demand the design that we implemented.

(11) In other words, if everybody hears
(12) quotes, you have no baseline to assess the impact
(13) of those quotes against.

(14) Q: If that's true, if the motive of the
(15) messenger is important, then why isn't there any
(16) difference between the SG and TB groups?

(17) A: Well, my belief about why there is no
(18) difference between those two groups is that, in
(19) fact, those are analogies to, in a way, not
(20) perfectly, but in a way, what has happened
(21) historically, that in the 1960s, the Surgeon
(22) General's voice, I believe, was louder than
(23) tobacco's voice in saying smoking is a health risk.
(24) There were certainly no messages from tobacco at
(25) that time saying that smoking is a health risk.

2—15:47:57 25—15:49:03 Page 475
Krosnick
[1] Then, in 2000, when the Florida events and so on
[2] unfolded, tobacco essentially by itself received
[3] media attention making assertions that smoking
[4] causes health problems, as well as in
[5] advertisements purchased by the tobacco industry in
[6] major newspapers and so on.
[7] So the SG group is in some ways, not
[8] perfectly, analogous to the 1960s and the TB group
[9] is analogous to what happened just a few months
[10] before we did our experiment
[11] What I wanted to see was what happens
[12] when those two events happen simultaneously. In
[13] other words, what would have happened if the
[14] tobacco admissions had been made that many years
[15] before simultaneous with the Surgeon General's
[16] assertions, and that's why they are all put
[17] together in these various conditions the way they
[18] appear.
[19] Now, just to be clear, the reason I'm
[20] saying that the SG condition isn't a perfect analog
[21] to the 1960s is because it doesn't include quotes
[22] from the tobacco industry saying smoking doesn't
[23] cause health problems or the evidence is not clear
[24] about whether smoking causes health problems. If

2—16:43:05 25—16:43:11 Page 476
Krosnick
[1] those messages had been included along with the
[2] Surgeon General, then we would have a closer match
[3] to what actually happened in the studies.
[4] Q: Why didn't you do that?
[5] A: It didn't cross my mind.
[6] MR. HEFTER: Could we take a break at
[7] some point?
[8] MR. BLEAKLEY: Sure.
[9] THE VIDEOGRAPHER: The time is 3:50
[10] p.m. and we are going off the record.
[11] (Recess taken.)
[12] THE VIDEOGRAPHER: The time is 4:13 p.m.
[13] and we are back on the record.
[14] BY MR. BLEAKLEY:
[15] Q: Would you turn in your report to
[16] pages — page 34.
[17] Paragraph 89 on page 34 includes some of
[18] the questions you asked as part of the
[19] motivation-to-quit analysis, right?
[20] A: Yes.
[21] Q: And you ask such questions as how much
[22] do you regret having started to smoke: a great
[23] deal, quite a bit, somewhat, or a little. How
[24] unhappy does it make you feel: extremely unhappy.

2—16:13:43 25—16:14:56 Page 477
Krosnick
[1] Those are what are referred to in the
[2] survey literature as ordinal questions or
[3] variables, aren't they?
[4] A: They can be treated either as ordinal or
[5] as interval.
[6] Q: They are not numeric, however, are they?
[7] A: I am not sure what you mean by numeric.
[8] Q: Let me ask you this: Do ordinal
[9] questions — or what was the other term you used?
[10] A: Interval.
[11] Q: — interval questions have numeric
[12] properties so it is reasonable to assume that the
[13] differences between answers are the same?
[14] A: Response scales of this sort are
[15] analyzable in light of a very large literature that
[16] has quantified the meanings of terms like this, and
[17] that quantification partly informed my selection of
[18] these response choices and partly informed my
[19] analysis of them.
[20] So, in other words, your question is are
[21] the gaps between these answer choices conceptually
[22] equal to one another, and the answer is that, yes,
[23] there is a very large body of literature that
[24] quantifies the meanings of these terms that led me

2—16:15:00 25—16:16:00 Page 478
Krosnick
[1] to select terms that have approximate equal space
[2] between them and that also justifies the numeric
[3] codings that I used in the analysis.
[4] Q: When you ask somebody whether or not
[5] they regret having started to smoke cigarettes and
[6] they answer a great deal, quite a bit, somewhat or
[7] a little, people don't mean the same thing when
[8] they use those answers, do they?
[9] A: Well, each of those answers means
[10] something different from each of the other answers.
[11] Q: And when I say a great deal, it may mean
[12] something very different from what you mean when
[13] you say a great deal; is that right?
[14] MR. HEFTER: Objection.
[15] A: It may mean something slightly
[16] different, yes, and part of this very large
[17] literature I am referring to documents the fact
[18] that when you have a scale like this with five
[19] choices, the disagreement between people in their
[20] interpretations of the meanings of these scale
[21] point options is small enough not to compromise the
[22] validity of the measure.
[23] Q: And when you ask somebody whether they
[24] are extremely happy, unhappy, very unhappy,

2-16:16:03 25-16:16:52

Page 479

Krosznick

[1] somewhat unhappy or slightly unhappy, you and I may
[2] answer those questions very differently; isn't that
[3] right?

[4] MR. HEFTER: Objection.

[5] A: It seemed to me you were trying to read
[6] this but you didn't quite read it correctly here
[7] as it is.

[8] I think, if I understand the question,
[9] could two people interpret a phrase like extremely
[10] unhappy slightly different from each other, yes,
[11] they could.

[12] Q: Well, I guess the point I am getting at
[13] is when you decide to use the answers to these
[14] questions in your analysis, isn't it appropriate to
[15] use the median instead of the mean in representing
[16] the average response that's given?

[17] A: No.

[18] Q: No, it isn't?

[19] A: No, it isn't.

[20] Q: Did you do that?

[21] A: No.

[22] Q: Isn't it a fact that if you had used the
[23] median instead of the mean there would be no
[24] statistically significant difference?

2-16:16:54 25-16:17:53

Page 480

Krosznick

[1] A: I have no idea, and I have never seen a
[2] median used in an analysis like this.

[3] Q: You have never seen a median used in
[4] analyzing answers to ordinal questions?

[5] A: I have never seen a median used in an
[6] analysis of an experiment where different
[7] respondents are subjected to different conditions
[8] and one is assessing the impact of those

[9] manipulations on an outcome variable. The reason
[10] being that the median is not a very powerful
[11] statistic for use in these circumstances, and it is
[12] likely to understate differences between
[13] conditions, so it's essentially never done.

[14] Q: So you think there is nothing wrong
[15] whatsoever with your having used the mean rather
[16] than the median?

[17] A: Correct.

[18] Q: Indeed, you think it is the right way to
[19] do it and using the median would be the wrong way
[20] to do it?

[21] A: I personally would not use words like
[22] right and wrong, but I am saying it is very, very
[23] common to do it the way I did it. I have never
[24] heard of anybody doing it with the median, and I

2-16:17:56 25-16:18:50

Page 481

Krosznick

[1] see distinct disadvantages to using the median that
[2] could lead to misleading conclusions of the
[3] analysis, so I wouldn't do it myself.

[4] Q: Have you written yourself that the
[5] appropriate measure here is the mean rather than
[6] the median?

[7] A: I have written it to the extent that
[8] that's what I said I did in my report.

[9] Q: No, I mean in the literature, in
[10] articles that you have written.

[11] A: This is so commonly done in hundreds of
[12] publications every year, that the idea of making
[13] the assertion that one should use the mean or
[14] defending the assertion that one should use the
[15] mean could not get published because it is so
[16] common knowledge in social sciences.

[17] Q: Could never get published? What do you
[18] mean by that?

[19] A: In good journals, you have to say
[20] something new that people don't already know in
[21] order to get published, generally speaking, and in
[22] a methods general, it's just very unlikely that a
[23] journal would find a statement like that to be of
[24] any value, because essentially everybody in the

2-16:18:52 25-16:21:36

Page 482

Krosznick

[1] profession recognizes that and conforms to it.

[2] MR. BLEAKLEY: I will turn it over to
[3] Mr. Williams.

[4] EXAMINATION BY
[5] MR. WILLIAMS:

[6] Q: Dr. Krosznick, my name is John Williams
[7] and I represent R.J. Reynolds.

[8] Right before the break there was a
[9] series of questions about the statistical
[10] significance you had found comparing various
[11] exposure groups, one among the other. I just want
[12] to make sure that I understand precisely what your
[13] conclusions were there.

[14] A: I am sorry, can I just interrupt? I am
[15] actually finding myself distracted by the walking
[16] and talking. Is there a way we can get physically
[17] closer to one another, so I can tune that out
[18] better?

[19] MR. WILLIAMS: There is a way to trade
[20] places.

[21] Off the record just a moment.

[22] THE VIDEOGRAPHER: The time is 4:19
[23] p.m. We are going off the record.

[24] (Discussion off the record.)

2—16:21:37 25—16:22:38 Page 483
Krosnick
THE VIDEOGRAPHER: It is 4:22 p.m. and
we are back on the record.
BY MR. WILLIAMS:
Q: Dr. Krosnick, a few questions on the
statistical significance that you found among your
comparison exposure groups, and I wanted to start
off with the group of all respondents.
In the group of all respondents, when
you compare the control and SG group against the
SGTB group, as you just indicated, you did find
statistical significance, correct?
A: Right.
Q: If you compared the control and SG group
against the TB and SGTB group, you testified today
that you also found statistical significance?
A: I did not testify to that.
Q: You did not testify to that?
A: I don't believe I have done that test.
Q: All right, so — my confusion, I am
sorry.
So you do not know if it's a
statistical significance comparison between, an
aggregation of the control and SG group against the
TB and SGTB group?

2—16:22:40 25—16:23:29 Page 484
Krosnick
A: Correct.
Q: Have you done that calculation?
A: I don't believe I have, no.
Q: You have not done the calculation?
A: I don't remember having done it.
Q: With respect to this group of all
respondents, if you were to look at the four
exposure groups separately, there is no
statistically significant difference, is there,
between any of these groups in terms of the
motivation to quit?
MR. HEFTER: Objection.
A: That is not correct.
Q: Which group is statistically
significant?
A: The control group is statistically
significantly different from the SGTB group.
Q: In the group of all respondents?
A: Yes.
Q: Now let's just look at current smokers,
not former smokers.
A: Okay.
Q: If you look at current smokers and look
at the individual exposure groups, the four

2—16:23:33 25—16:24:25 Page 485
Krosnick
exposure groups separately, do you get any
statistical significance?
A: I don't know the answer to that.
Q: Have you looked?
A: I have done an analysis that is somewhat
relevant to what you are saying, but exactly what
you said.
Q: What analysis have you done?
A: What I have done is to again combine the
control group with the SG group and to compare that
combination with the SGTB group.
Q: And you found no statistical
significance?
A: And I found a statistically significant
difference between those two.
Q: You found a statistically significant
difference between the control and SG group versus
the TB and SGTB group?
A: No.
MR. HEFTER: Objection.
Q: No? All right.
What statistically significant
relationship did you find in the group of current
smokers?

2—16:24:26 25—16:25:14 Page 486
Krosnick
MR. HEFTER: John, I think the term is
significant —
MR. WILLIAMS: I am going to find out
right now.
MR. HEFTER: Well, it is statistically
significant difference and you have been
asking just statistic significance.
Q: Did you find any statistically
significant difference in the group of current
smokers?
A: Yes.
Q: In which comparison group?
A: I compared the combination of the
control group and the SG group only with the SGTB
group.
Q: And it is statistically significant to
what level, sir?
MR. HEFTER: Different.
Q: Different to what level?
A: Let me tell you, in case you are
confused. This was done with a slightly different
methodology than you may be looking at here. This
was done in Lisrel (phonetic), which is a
structural equation modeling program, and you have

2-16:25:18 25-16:26:20

Page 487

Krosnick

(1) for months had the printouts of that analysis.
(2) That is not written up in my report, but it was
(3) submitted to you long ago.

(4) Q: To what degree did you find it to be
(5) statistically significantly different?

(6) A: All I can tell you is that the P value
(7) was less than .05, but it may have been
(8) considerably less than .05. I just don't know the
(9) details. I did it to reassure myself and I was
(10) reassured.

(11) Q: Did you look at that with respect to the
(12) group of just Blue Cross-Blue Shield subscribers?
(13) Did you stratify your data in any way?

(14) A: Well, the end of this report involves
(15) separating Blue Cross-Blue Shield subscribers from
(16) nonsubscribers, yes.

(17) Q: And looking at the group of all Blue
(18) Cross-Blue Shield ever subscribers — you have the
(19) word "ever" in your computer program, so you know
(20) what I am talking about?

(21) A: Yes, I do.

(22) Q: Have you looked to determine any
(23) statistically significant differences between the
(24) four exposure groups?

25-16:26:20 25-16:27:25

Page 488

Krosnick

(1) A: Do you mind if I consult the report
(2) here?

(3) Q: You may.

(4) MR. HEFTER: We are talking about the
(5) motivation to quit?

(6) MR. WILLIAMS: All of this is
(7) motivation to quit right now.

(8) Q: When I am asking these questions of
(9) statistically significant difference, you

(10) understand I am talking about the
(11) motivation-to-quit index that you created?

(12) A: Yes, I do.

(13) Q: And in which exposure groups did you
(14) find a statistically significant difference?

(15) A: That, I can't answer. I don't remember
(16) specifically. What's in the report here is a
(17) significance test of whether subscribers and
(18) nonsubscribers differ from one another in the
(19) impact of the manipulations, and that P value
(20) is .71, which means it is not even close to
(21) significant, but I can't go beyond that in
(22) answering the question.

(23) Q: So you did not compare the individual
(24) exposure groups just in terms of the subset of Blue

2-16:27:30 25-16:28:33

Page 489

Krosnick

(1) Cross-Blue Shield ever subscribers?

(2) A: I can't say that I didn't — if I did,
(3) it's in the printouts that you all received a while
(4) ago. I just am not remembering what those — I
(5) would think those results would have been
(6) associated with this test here, but I don't — I
(7) don't remember what those results were.

(8) Q: And you recall a further stratification
(9) in terms of looking at Blue Cross-Blue Shield
(10) current smokers?

(11) A: No.

(12) Q: Do you recall whether or not you
(13) obtained any statistically significant differences
(14) in your exposure levels in any of the Blue
(15) Cross-Blue Shield only subscriber population that
(16) you looked at?

(17) MR. HEFTER: Objection.

(18) A: No, I don't, and the reason I wasn't
(19) looking at those is because once you start
(20) stratifying down to pretty smaller levels, the
(21) samples get much smaller and statistical power goes
(22) down substantially, so I don't remember conducting
(23) and certainly don't remember looking carefully at
(24) any such analyses because of that.

2-16:28:35 25-16:29:53

Page 490

Krosnick

(1) Q: With respect — you did say you did an
(2) analysis stratifying current smokers and former
(3) smokers in the all respondents category, correct?

(4) A: That's correct.

(5) Q: Did you find, sir, that former smokers
(6) were more likely to quit than current smokers?

(7) MR. HEFTER: Objection.

(8) A: That isn't a question that is answerable
(9) with our data.

(10) Q: Did you find that former smokers were
(11) much more motivated to quit than current smokers?

(12) A: I didn't do that analysis.

(13) Q: Do you have any expectation as to what
(14) you would find if you had done that analysis?

(15) A: I think we have to be clear here that I
(16) don't think, taken literally, that people who have
(17) already quit have a motivation to quit. I don't —
(18) now, I did use the label "motivation to quit" to
(19) describe the index, but I hope I was clear that was
(20) simply a label for convenience. Since there are a
(21) lot of components to it, there is no single good
(22) label, so I used that one, but —

(23) Q: The label was the same, but the factors
(24) that went into the determinations were different

2—16:29:56 25—16:30:46 Page 491
Krosnick
(1) for the former smokers and current smokers.
(2) correct?
(3) A: Correct.
(4) Q: Now let me move on — I am going to come
(5) back to the motivation to quit in a few moments,
(6) but I wanted to ask a few questions about your
(7) expertise, sir, because I had some confusion.
(8) You indicated to Mr. Bleakley that you
(9) consider yourself an expert in determining the
(10) reasons that people start smoking and the reasons
(11) they continue smoking, correct?
(12) A: I have expertise in those areas he
(13) defined expert somehow and I found that acceptable
(14) to capture, yes.
(15) Q: You didn't have any problems answering
(16) his questions about whether you were an expert. I
(17) am going to use the same definitions, okay?
(18) A: Yes. I mean, I did have a little
(19) trouble at that time. I often do with that word,
(20) expert, is used as —
(21) Q: But when he continued to work on you,
(22) you agreed with him, right?
(23) A: Yes.
(24) Q: Now, in your expert opinion, sir, what

2—16:30:46 25—16:31:03 Page 492
Krosnick
(1) are the predictors of smoking onset?
(2) MR. HEETER: Objection.
(3) A: That is a complicated answer. There are
(4) social predictors and there are cognitive
(5) predictors. To my knowledge, from the literature
(6) that I have expertise in, there is evidence that
(7) parents play a role in determining whether a child
(8) starts to smoke or not.
(9) Q: You are talking about social predictors
(10) now?
(11) A: Yes I am.
(12) Q: Let's go through the list of social
(13) predictors and then we will get to cognitive
(14) predictors.
(15) A: There is also evidence that peers play a
(16) role in determining whether a child starts to smoke
(17) or not, and there is also evidence siblings play a
(18) role in determining whether a child starts to smoke
(19) or not. There is also evidence that authority
(20) figures such as teachers can play a role as well in
(21) influencing that process.
(22) Q: May I stop you for just one minute?
(23) A: Sure.
(24) Q: When you were saying predictors, I am

2—16:32:09 25—16:33:11 Page 493
Krosnick
(1) talking about predictors towards the smoking
(2) decision, so you can have negative predictors and
(3) affirmative predictors, right?
(4) A: Absolutely.
(5) Q: I am asking about affirmative predictors
(6) now. Are you say that teachers, what teachers'
(7) views are is an affirmative predictor of smoking
(8) behavior?
(9) A: We don't really think in our literature
(10) about a distinction between affirmative predictors
(11) and the opposite. What we think about is the idea
(12) that in this case, when we are talking about social
(13) predictors, is that the behavior of each of these
(14) categories of people can influence whether a child
(15) starts to smoke or not. So, in other words, we can
(16) talk about teachers, for example, as modeling
(17) cigarette smoking for children, as doing nothing,
(18) and saying nothing about smoking, or as making
(19) statements that are antismoking, and so if teachers
(20) model smoking for children, that enhances the
(21) likelihood that they will start to smoke. If
(22) teachers make statements suggesting kids not smoke,
(23) that will reduce the likelihood. You can't really
(24) categorize a person as affirmative or discouraging.

2—16:33:14 25—16:34:25 Page 494
Krosnick
(1) Q: I take your point.
(2) Can you continue with your list of
(3) social predictors?
(4) A: There is also literature on the impact
(5) of mass media advertising on children's initiation
(6) of smoking. I know that literature to be
(7) controversial. I have not spent time carefully
(8) reading it, reaching a decision about it. That
(9) puts it in contrast to the other categories of
(10) social predictors I have mentioned.
(11) Q: Are you going to express an opinion in
(12) any way on the impact of mass media or advertising
(13) on the smoking decision?
(14) A: I have no plans to.
(15) Q: Go on. Anything else with respect to
(16) social predictors?
(17) A: I don't think so.
(18) Q: Cognitive predictors?
(19) A: All right. Now, in the cognitive
(20) predictors domain, really, this includes a series
(21) of beliefs that you might say reside in the head of
(22) a child or an adult about the effects of smoking in
(23) a variety of ways. So, for example, a child might
(24) believe that smoking cigarettes might make him or

2-16:34:28 25-16:35:43

Page 495

Krosnick

- (1) her more popular. A child might believe that
(2) smoking would make him or her more relaxed in
(3) social situations.
(4) Q: May I stop you for a moment?
(5) I understand that these are all
(6) theories. I am interested in what your opinion is
(7) as an expert. I understand there is a huge amount
(8) of literature out there on all of these things. I
(9) am asking, in your expert opinion, what are the
(10) cognitive predictors of smoking onset.
(11) A: That's what I am describing for you.
(12) Q: So you are giving me all of the things
(13) that you believe are cognitive predictors?
(14) A: Yes, I am.
(15) Q: So you said popularity?
(16) A: Beliefs about popularity consequences,
(17) beliefs about relaxation and social comfort,
(18) beliefs about the health consequences of smoking,
(19) and I guess what I will do is to create a new
(20) category which doesn't quite fall under cognitive
(21) predictors which might fall under personality
(22) predictors, and this might include, for example,
(23) something that's been called rebelliousness,
(24) another called risk-taking orientation.

2-16:35:54 25-16:37:06

Page 496

Krosnick

- (1) Q: Are you aware of the literature, sir,
(2) that suggests there is a relationship between
(3) smoking onset and other risk-taking behaviors?
(4) MR. HEFTER: Objection.
(5) A: Yes.
(6) Q: You are aware of that literature?
(7) A: Yes, I am.
(8) Q: Who would you cite as some of the
(9) authorities who have written in that area?
(10) A: Well, it's a very large literature, but
(11) Denise Kandel is a key person whose work who has
(12) been present in that area.
(13) Q: Could you spell that for the reporter?
(14) A: Sure. Kandel, K-a-n-d-e-l.
(15) Q: Guy Parcel, P-a-r-c-e-l, you don't know
(16) his work?
(17) A: I am sorry, I misunderstood. Say that
(18) again?
(19) Q: Guy Parcel —
(20) A: Guy Parcel, no, I don't know
(21) particularly.
(22) Q: Jessor?
(23) A: Yes, Dick Jessor. sure.
(24) Q: Anyone else?

2-16:37:07 25-16:38:57

Page 497

Krosnick

- (1) A: There are lots of people. This is a
(2) very large literature.
(3) Q: Risk-taking behavior, you mentioned.
(4) Let's go on.
(5) You started talking about personality
(6) predictors and you had rebelliousness and
(7) risk-taking behavior — excuse me, risk-taking
(8) orientation.
(9) A: Those are the variables that I focused
(10) my attention on, so I will stop our list there.
(11) Q: All right.
(12) Now, you stated that knowledge of health
(13) consequences is a predictor of smoking onset,
(14) correct?
(15) A: Yes.
(16) Q: I want to ask you a similar series of
(17) questions with respect to predictors of smoking
(18) continuation, or if you want to state that in
(19) converse, the predictors of quitting behavior.
(20) Would your list be the same or would the
(21) list be any different?
(22) A: The literature on quitting has taken a
(23) different form typically. It's been primarily
(24) among adults, it's got a large focus on the impact

2-16:39:01 25-16:40:19

Page 498

Krosnick

- (1) of intervention efforts, nicotine patches and
(2) devices to facilitate the process and so on, so I
(3) definitely would not give you the same list because
(4) the issues that have been focused on in that
(5) literature are different, but —
(6) Q: I am just asking for your expert
(7) opinion. I am aware that there is an abundance of
(8) literature on all aspects of smoking. What I want
(9) to know is your expert opinion as to the predictors
(10) of smoking continuation.
(11) A: Okay. I started to answer that, I
(12) think, by saying that the literature has identified
(13) many different sorts of predictors that would not
(14) come up in this list, so I was answering your
(15) question about would I give you the same list.
(16) Those predictors include beliefs about
(17) the health consequences of smoking.
(18) Q: Just to shorten this, you already gave
(19) me that when I asked you the questions about
(20) smoking onset. I am asking you is the list the
(21) same as the — you don't need to repeat the ones —
(22) A: I am sorry, I have said the list was not
(23) the same, and I guess I was going beyond that to
(24) clarify what would be on the list.

2-16:40:21 25-16:41:19 Page 499
Krosnick
(1) Q: All right, do it that way. What would
(2) be on that list?
(3) A: As I said, health consequences.
(4) Q: Health consequences, I got that.
(5) A: The nature, quality of intervention
(6) programs that individuals participate in, work has
(7) shown different sorts of intervention programs
(8) differ in effectiveness.
(9) Q: May I stop you there?
(10) A: Sure.
(11) Q: Are you saying that intervention
(12) programs are not a factor in terms of the onset of
(13) smoking? You didn't mention that before, but you
(14) did in terms of cessation.
(15) A: Here I am speaking of intervention
(16) programs designed to facilitate cessation, so, by
(17) definition they would not be.
(18) I guess maybe I misunderstood your
(19) earlier question. If would you like to know, have
(20) intervention programs been done that affected
(21) smoking onset, absolutely there have been and they
(22) have been effective, so —
(23) Q: Would you name the ones that have been
(24) effective, the intervention programs that have

2-16:42:08 25-16:43:40 Page 501
Krosnick
(1) intervention studies.
(2) You know, it's a very large literature.
(3) There are review articles, for example, in the
(4) American Journal of Public Health reviewing the
(5) impact of these studies.
(6) Q: I assume all of those are published?
(7) A: The ones I am referring to are
(8) published, yes.
(9) Q: They are on your reliance list?
(10) A: No.
(11) Q: Let's go ahead with your list of
(12) predictors of smoking cessation, or continuation.
(13) A: Those are the predictors that I have
(14) focused my attention on I can tell you have played a
(15) role. I know there are others. I am just not in a
(16) position to detail them for you.
(17) Q: Let me ask you this question: Are
(18) parents a predictor of smoking continuation?
(19) A: I don't know the answer to that.
(20) Q: Are peers a predictor of smoking
(21) continuation?
(22) A: See, I am having trouble with the
(23) question, because, in other words, we typically
(24) wouldn't do our analyses — I think, if I am

2-16:43:43 25-16:44:34 Page 502
Krosnick
(1) shown effectiveness, studies with respect to
(2) smoking onset?
(3) A: Again, it's dozens of studies, if not
(4) more. It is a very large set. The study I worked
(5) on at Harvard University was effective, there were
(6) studies —
(7) Q: Can you give me the name of that study?
(8) A: I don't think I had a name.
(9) Q: How would I find out about it?
(10) MR. HEEGER: You have the published
(11) literature.
(12) A: It's on my vitae.
(13) Q: It is on your vitae?
(14) A: Yes.
(15) Q: Do you recall the name?
(16) A: There is no name. There are two
(17) publications that came from that study which I
(18) discussed extensively at my first deposition.
(19) Q: Go ahead. What are the other
(20) intervention studies?
(21) A: There are groups at the University of
(22) Minnesota, at the University of Southern
(23) California, at the University of Texas, at Stanford
(24) University, all of which have mounted successful

2-16:44:34 25-16:45:19 Page 503
Krosnick
(1) understanding the question, you are saying, okay,
(2) let's only focus on people who have started to
(3) smoke, and the question is, can we predict which of
(4) those people will quit and which ones will not.
(5) Q: No. Let's start again.
(6) You indicated right off the bat that you
(7) considered yourself an expert in determining the
(8) reasons that people start smoking and the reasons
(9) they continue smoking.
(10) A: Just to be clear, what I said is I have
(11) expertise. That expertise does not claim to have
(12) all of the details of that literature. It claims
(13) to have some details, and I have told you about
(14) what I know in this area.
(15) Q: And you gave me a list of all of those
(16) factors that in your expert opinion were predictors
(17) of smoking onset, correct?
(18) A: That I am aware of, yes.
(19) Q: That you are aware of. Well, if you are
(20) not aware of something, you can't be an expert in,
(21) it okay?
(22) A: Okay.
(23) Q: And then I asked for a list of those
(24) predictors of smoking continuation.

2-16:44:36 25-16:45:32 Page 503
Krosnick
(1) A: And I am having trouble with the term
(2) "continuation" and I tried to define it and I think
(3) you were suggesting I didn't define it the way you
(4) meant it to be defined.
(5) Q: What are the predictors, what factors in
(6) the literature, in your expert opinion, will
(7) predict whether somebody will continue to smoke
(8) once they have started to smoke?
(9) MR. HEFTER: Objection.
(10) Q: Can you answer the question?
(11) A: I tried to interpret the question a
(12) moment ago by saying I can envision an analysis
(13) that might be done where one focuses only on people
(14) who are smoking and then looks at what are the
(15) factors that predict whether among that group, who
(16) are the people who quit and who are those who
(17) don't. Is that a correct interpretation?
(18) Q: That's fine. Go ahead and answer it in
(19) that way.
(20) A: The list I gave you already are the
(21) predictors that I feel confident, sitting here now,
(22) without reviewing additional documents, are
(23) documented to have been shown to be reliable
(24) predictors of quitting behavior, and therefore, I

2-16:45:35 25-16:46:44 Page 504
Krosnick
(1) think, the way you are using is the predictors of
(2) continuation, because continuation is sort of a
(3) blurrier image of quitting.
(4) Q: And that list includes intervention
(5) programs and health consequences?
(6) A: That's correct.
(7) Q: Anything else?
(8) A: Not that I can offer a competent opinion
(9) about today.
(10) Q: Do you have your expert report there,
(11) please? Do you have your expert report there?
(12) A: Yes, I do.
(13) Q: By the way, before I forget, I want to
(14) put a proposition to you and just ask on this,
(15) while we are on this topic, whether you agree or
(16) disagree, and the proposition is this.
(17) Continuing?
(18) A: Yes, I am.
(19) Q: Knowledge of long-term health
(20) consequences of smoking has not been a strong
(21) predictor of adolescent smoking.
(22) Would you agree or disagree with that
(23) proposition?
(24) MR. HEFTER: Objection.

2-16:46:45 25-16:48:08 Page 505
Krosnick
(1) A: Say that one more time, please.
(2) Q: I will say it again.
(3) Knowledge of long-term health
(4) consequences of smoking has not been a strong
(5) predictor of adolescent smoking.
(6) MR. HEFTER: Same objection.
(7) A: There are a number of pieces that I have
(8) trouble with. One is "has not been," referring to
(9) the past tense. I am not clear about what period
(10) we are speaking about.
(11) Q: 1990s. In the 1990s, would it be
(12) accurate to say that knowledge of long-term health
(13) consequences of smoking has not been a strong
(14) predictor of adolescent smoking?
(15) MR. HEFTER: Objection.
(16) A: Most of the data I know about on this
(17) issue were not collected in the 1990s, so I can't,
(18) with confidence, agree or disagree with that
(19) statement about the 1990s.
(20) Q: As of 1993, would the following
(21) statement be something you could agree with or
(22) disagree with, and I am going to say it for a
(23) fourth time.
(24) Knowledge of long-term health

2-16:48:10 25-16:49:07 Page 506
Krosnick
(1) consequences of smoking has not been a strong
(2) predictor of adolescent smoking.
(3) MR. HEFTER: Objection.
(4) A: And I asked "has not been" referring to
(5) what time period and you said the 1990s. Did you
(6) mean earlier?
(7) Q: I am sorry, prior to 1993 or 1994, okay,
(8) as of that date, would you agree or disagree with
(9) that?
(10) A: Prior to that, okay.
(11) I would neither agree or disagree for
(12) the following reason, that my understanding of the
(13) literature is that it has quite consistently been a
(14) reliable predictor of smoking behavior.
(15) Q: What has?
(16) A: The question, then is it a strong
(17) predictor or is it not a strong predictor, and we
(18) don't have universally agreed upon or largely
(19) agreed upon standards for what a strong predictor
(20) or what a not-strong predictor is, and therefore,
(21) it is not easy for me to agree or disagree with the
(22) strong part of it, but I would agree with a
(23) statement that says it has been a consistent
(24) predictor.

52434 5542

2—16:49:08 25—16:50:28 Page 507
Krosnick
(1) Q: So you believe that as of 1993 or 1994,
(2) knowledge of long-term health consequences has been
(3) a consistent predictor of adolescent smoking?
(4) A: And by consistent, what I mean is across
(5) many studies conducted over decades, yes.
(6) Q: What about this statement: As of 1993
(7) or 1994, virtually all U.S. adolescents, smokers
(8) and nonsmokers alike, are aware of the long-term
(9) health effects of smoking.
(10) A: This brings us back to a discussion we
(11) had earlier about the distinction between aware and
(12) believe. If you will permit me to substitute the
(13) word "believe" for aware, that is, believe that
(14) smoking causes undesirable health consequences, I
(15) agree with that statement.
(16) Q: Do you have your report, sir?
(17) A: Yes.
(18) Q: Let me go to that now, sir.
(19) If you go to paragraph 60, do you have
(20) that there?
(21) A: Yes, I do.
(22) Q: And you talk about there the standard
(23) measure of the causal impact of a risk factor is
(24) relative risk.
(25)

2—16:50:29 25—16:51:00 Page 508
Krosnick
(1) Do you see that there?
(2) MR. HEFTER: In paragraph 60, Jim?
(3) MR. WILLIAMS: Yes.
(4) A: Yes.
(5) Q: And you state that in your SRBI
(6) research, that you attempted to measure this
(7) relative risk.
(8) A: Yes. Excuse me, no.
(9) Q: Did you not in your SRBI research
(10) attempt to measure something called relative risk?
(11) A: No.
(12) Q: You didn't? What did you do?
(13) A: We attempted to measure perceptions of
(14) relative risk.
(15) Q: And in the next few paragraphs here, you
(16) talk about how you went about or SRBI went about
(17) measuring perceptions of relative risk, correct?
(18) A: Yes.
(19) Q: Now, paragraph 68, could you focus on
(20) that.
(21) A: Yes.
(22) Q: You say, in order to gauge people's
(23) perception of the increase in the risk of lung
(24) cancer caused by smoking, perceptions of relative
(25)

2—16:51:32 25—16:52:26 Page 509
Krosnick
(1) risk were calculated, and then you go on to explain
(2) why.
(3) Do you see that?
(4) A: Yes, I do.
(5) Q: And then you go on in paragraph 72, if
(6) you keep going, to conclude that the vast majority
(7) of American smokers underestimate the increase in
(8) risk of getting lung cancer, right?
(9) A: Just to be clear, that is current and
(10) former smokers.
(11) Q: Current and former smokers, yes. And
(12) that's going to be your opinion in this case?
(13) A: That's correct.
(14) Q: That the vast majority of American
(15) current and former smokers currently underestimate
(16) the increase in risk?
(17) A: That's correct.
(18) Q: Now here's my question: Is there any
(19) difference in your mind between the concept of
(20) perceived relative risk attributable to smoking and
(21) the concept that you express in paragraph 42 here
(22) of increased risk attributable to smoking?
(23) A: You didn't mean paragraph 42, did you?
(24) Q: Paragraph 72.
(25)

2—16:52:26 25—16:53:06 Page 510
Krosnick
(1) A: 72, okay, that's a new one? I am sorry,
(2) just give me a second to read 72. I don't think we
(3) got there yet.
(4) MR. HEFTER: Can I have the question
(5) read back, please?
(6) Q: No, we did get there. You just
(7) corrected me when I said American smokers, you said
(8) American current and former smokers.
(9) A: Sorry. You are right.
(10) MR. HEFTER: I am confused because you
(11) said paragraph 42 and I would like the
(12) question —
(13) Q: Paragraph 72 is in front of you as
(14) well.
(15) MR. HEFTER: I know, but I want the
(16) question read back.
(17) MR. WILLIAMS: Let me restate it. May
(18) I restate it?
(19) A: I'll tell you what, can I read this
(20) first and then you restate it?
(21) Q: Yes.
(22) A: Thank you.
(23) Go ahead.
(24) Q: Now, my question is this: Is there any
(25)

2-16:53:07 25-16:54:19 Page 511
Krosnick
(1) difference in your mind between the concept of
(2) perceived relative risk attributable to smoking and
(3) the concept expressed in paragraph 72 of increased
(4) risk attributable to smoking?
(5) A: I was using the phrase increased risk to
(6) be synonymous with relative risk.
(7) Q: So in your report, if we see perceived
(8) relative risk or increased risk, we can use those
(9) terms interchangeably?
(10) A: Yes, please.
(11) Q: Is it your opinion, sir, that there is a
(12) relationship between an individual's perception of
(13) relative risk and smoking onset?
(14) A: Yes.
(15) Q: Is it your opinion that individuals who
(16) perceive the relative risk of smoking as low, are
(17) more likely to start smoking than those who
(18) perceive the relative risk to be high?
(19) A: Yes.
(20) Q: Let me ask you this about these relative
(21) risk rates, because you have calculated a relative
(22) risk ratio, correct?
(23) A: Yes.
(24) Q: In your opinion, do individuals who have

2-16:54:21 25-16:55:32 Page 512
Krosnick
(1) the same relative risk rate have the same
(2) perceptions of the increased risk of smoking?
(3) A: Not necessarily.
(4) Q: How would they be different?
(5) A: Two people, for example, could differ in
(6) the certainty with which they hold —
(7) Q: Take out certainty. Other than
(8) certainty, I understand that —
(9) A: Okay, sorry, then you better state the
(10) question again.
(11) Q: All right. Holding constant the concept
(12) of certainty — holding constant the concept of
(13) certainty, does someone who has —
(14) MR. WILLIAMS: Let me strike that and
(15) move on.
(16) No, I will ask the question.
(17) Q: Holding constant the concept of
(18) certainty of belief —
(19) A: Yes.
(20) Q: — do individuals who have the same
(21) relative risk ratio have the same perception of the
(22) increased risk of smoking?
(23) MR. HEFTER: Objection.
(24) A: They do in terms of the ratio, but they

2-16:55:47 25-16:56:35 Page 513
Krosnick
(1) don't necessarily in terms of the ingredients of
(2) the ratio.
(3) Q: And by ingredients, what do you mean?
(4) A: Well, the two numbers that were used to
(5) calculate relative risk.
(6) Q: Oh, sure, right. The ratio would be
(7) different, but they would have the same relative
(8) risk? Is that your view?
(9) MR. HEFTER: Objection.
(10) A: Not exactly. What I was saying is the
(11) ratio could be the same for two people, but the
(12) ingredients could be different. In other words, I
(13) could think two nonsmokers and four smokers, you
(14) could think four nonsmokers and eight smokers. We
(15) would each have the same relative risk ratio
(16) whereas the two ingredient beliefs used to
(17) calculate that ratio would be different.
(18) Q: Let me illustrate this.
(19) Go ahead, I did not want to cut you off.
(20) A: I just wanted to be clear. If we are
(21) talking about people's actual perceptions, then the
(22) way you phrased it is correct, but just to be
(23) clear, in case you are moving toward this — in
(24) every survey measurement, particularly a

2-16:56:37 25-16:57:37 Page 514
Krosnick
(1) measurement like this is going to have some small
(2) amount of random measurement in it, so when we
(3) measure two people to have a relative risk of five,
(4) it's not necessarily the case that those two
(5) people, in fact, have identical relative risk
(6) perceptions. They could be slightly different from
(7) one another, but they appear to be identical in
(8) this measurement.
(9) Q: And those people would have the same
(10) perception of increased risk as well, because we
(11) can use those interchangeably, correct?
(12) A: Yes. According to this measurement,
(13) right.
(14) Q: Now, we have printed out from your
(15) database some numbers. Of all of the respondents,
(16) who, according to your ratios, have a relative risk
(17) of 2.0, in other words, they believe that twice as
(18) many smokers will get lung cancer as nonsmokers,
(19) okay?
(20) A: Yes.
(21) Q: And I am going to give this to your
(22) counsel. I know you probably haven't seen
(23) something formatted like this before, but I will
(24) represent that this is a direct printout from your

2-16:57:40 25-16:58:59 Page 515
Krosnick
(1) data.
(2) MR. WILLIAMS: Do we have an exhibit
(3) number yet from today?
(4) MR. HEFTER: This is number one.
(5) MR. WILLIAMS: How about that, at 5
(6) o'clock in the afternoon, we have Exhibit 1.
(7) THE WITNESS: Only because I don't have
(8) a hotel tonight, it might help to get a
(9) better idea of how long —
(10) MR. HEFTER: Perhaps we should discuss
(11) this.
(12) MR. WILLIAMS: Do you want it on or
(13) off?
(14) MR. HEFTER: Let's go off for a
(15) second.
(16) THE VIDEOGRAPHER: The time is 4:59
(17) p.m. and we are going off the record.
(18) (Discussion off the record.)
(19) THE VIDEOGRAPHER: The time is 5:01 p.m.
(20) and we are back on the record.
(21) (Krosnick Exhibit 1, two-page document
(22) headed "Respondents who have according to
(23) Krosnick a relative risk of 2.0," marked for
(24) identification, as of this date.)

2-16:58:59 25-16:59:49 Page 516
Krosnick
(1) Q: I want to focus here on two separate
(2) groups, Dr. Krosnick.
(3) First of all, there is a group of 16
(4) right in the middle here, in which the relative
(5) risk is 2.0 and that is because they believe that
(6) 10 nonsmokers and 20 smokers will get lung cancer,
(7) okay?
(8) A: Yes.
(9) Q: And then there is a group down here at
(10) the bottom, also relative risk of 2.0, but their
(11) numbers are 50 and 100 respectively.
(12) Do you see that?
(13) A: Yes, I do.
(14) Q: Both have a relative risk of two, right?
(15) A: Yes.
(16) Q: Now the first group estimates that the
(17) increased risk will be 10 out of a thousand
(18) smokers, correct?
(19) A: Yes.
(20) Q: The second group believes the increase
(21) will be 50 out of a thousand smokers, correct?
(22) A: Yes.
(23) Q: Now those people have the same
(24) estimates of relative risk, in your view, correct?

2-16:59:54 25-17:00:53 Page 517
Krosnick
(1) A: Yes.
(2) Q: Do they have the same view about
(3) increased risk?
(4) A: Yes.
(5) Q: Now, which group, in your view, is
(6) likely to start — is more likely to start to
(7) smoke, the group that estimates an additional 10 in
(8) a thousand, the group that estimates an additional
(9) 50 in a thousand, or is it the same?
(10) A: It's the same.
(11) Q: Let's go to the third group, if you
(12) could turn the page to, actually, the end of the
(13) page. There is a big group of 33 people who —
(14) some of whom — excuse me, all of whom think that
(15) the number of nonsmokers is 250 and the number of
(16) smokers is 500. Do you see that?
(17) A: Yes.
(18) Q: Still a relative risk of two?
(19) A: Uh-huh.
(20) Q: And these people have exactly the same
(21) perceptions of increased risk as the first group,
(22) in your view, correct?
(23) A: Yes.
(24) Q: This group thinks that 250 more people

2-17:00:55 25-17:01:39 Page 518
Krosnick
(1) are going to get lung cancer than the first group
(2) that thinks just 10 people are going to get lung
(3) cancer, 10 more people are going to get lung
(4) cancer, right?
(5) A: Yes.
(6) Q: And in your view, they have the same
(7) perceptions of risk, correct?
(8) A: No.
(9) Q: Relative risk?
(10) A: Yes.
(11) Q: Increased risk?
(12) A: Yes.
(13) Q: Now let's go to the final group on this
(14) page.
(15) By the way, all of these people
(16) underestimate the risk, in your view, the relative
(17) risk, in your view, correct?
(18) A: Correct.
(19) Q: Can we go to the last group — there is
(20) a group of 17 right at the tail end. If you will,
(21) just take a look at that for a minute.
(22) Those people estimate the risk of
(23) getting lung cancer, if you are a nonsmoker, at
(24) 500, and the risk of getting lung cancer, if you

2-17:01:42 25-17:02:22

Page 519

Krosnick

are a smoker, at 1,000 out of 1,000, right?

3] A: Yes.

4] Q: So they are virtually certain — not

5] virtually certain, they are certain that somebody

6] who smokes is going to get lung cancer?

7] MR. HEFTER: Objection.

8] A: No.

9] Q: They believe 1,000 out of 1,000 are

10] going to get lung cancer?

11] A: Yes.

12] Q: They believe that if you smoke, you will

13] get lung cancer?

14] MR. HEFTER: Objection.

15] A: No.

16] Q: They don't believe that?

17] A: You said certain, and they are — they

18] may — as we talked about earlier, they may vary in

19] certainty, but this is their perception.

20] Q: Their perception is that if you smoke,

21] you will get lung cancer?

22] MR. HEFTER: Objection.

23] A: Not if they are not 100 percent certain.

24] Q: We don't know if they are 100 percent

25] certain here or not?

2-17:02:23 25-17:03:20

Page 520

Krosnick

1] A: My data will allow you to look at

2] certainty, and there is distribution of certainty

3] associated with these answers and it is very rarely

4] maximally certain.

5] Q: Can we at least agree that out of this

6] group they believe that 100 percent of smokers will

7] get lung cancer?

8] A: Yes.

9] Q: And the relative risk is still 2?

10] A: That's correct.

11] Q: And in your view, they underestimate the

12] relative risk?

13] A: Right. In my view, all of these groups

14] perceive their personal probability of getting lung

15] cancer implicated by smoking to be double what it

16] would be if they hadn't smoked.

17] Q: So is it your opinion, sir, that even

18] though this last group can all believe that it is

19] 100 percent chance of getting lung cancer, that

20] they still underestimate the risk?

21] A: The relative risk.

22] Q: They underestimate the relative risk,

23] even though they believe a thousand out of a

24] thousand are going to get lung cancer?

2-17:03:22 25-17:06:23

Page 521

Krosnick

1] A: Yes.

2] Q: I want to give you another example, sir,

3] and ask your opinion as to predicting smoking

4] onset, and it is this: We will stay with this

5] group of 500 nonsmokers and 1,000 smokers, all

6] right, but we will compare that to a group of

7] people — and it is not reflected on here — and

8] one person — excuse me, they believe one nonsmoker

9] will get lung cancer and three smokers, okay, so a

10] relative risk of 3, but an increase of two people.

11] A: Yes.

12] Q: Can you stay with that one?

13] A: Yes.

14] Q: Now, in this hypothetical, you would

15] believe that it is more likely for the people in

16] the group of 500 and 1,000 to take up smoking than

17] the group that had a relative risk of 3?

18] MR. HEFTER: Objection.

19] A: Not necessarily.

20] Q: Let's review the bidding. Did you not

21] testify — you testified before, did you not, that

22] the higher a perceived relative risk, in your view,

23] the less likely that person was to smoke?

24] A: Correct.

2-17:06:24 25-17:07:33

Page 522

Krosnick

1] Q: Now, a relative risk of 3 is a higher

2] relative risk than 2, correct?

3] A: Correct.

4] Q: So you would expect that the people in

5] the relative risk ratio group of 3 would have —

6] would be more likely to start to smoke than the

7] relative risk group of 2, correct?

8] A: That's where we are getting a little

9] tripped up. Not exactly. With regard only to

10] relative risk, yes, but there — obviously, there

11] is a second consideration here, which is absolute

12] risk, and that — and what you have done — up

13] until this point, I believe you have mostly asked

14] me questions about the impacts of these two

15] ingredients on relative risk, and I have agreed

16] with all of your illustrations of the fact that

17] very different absolute risk levels can be

18] associated with comparable relative risk levels,

19] just as I said in my original answer a while ago,

20] but now you have made the additional leap of going

21] to likelihood of quitting or likelihood of

22] starting, and when we now move to behavior, I do

23] believe that it is potential — there is potential

24] for relative risk and absolute risk and lots of

2—17:07:37 25—17:08:54 Page 523
Krosnick
[1] other considerations that factor in here as we have
[2] talked about, and so, in other words, the group of
[3] people who are 1 and 3, who have a relative risk of
[4] 3, have a higher relative risk of the people who
[5] are 500 and 1,000.
[6] Those two groups also differ in the
[7] absolute risk levels they perceive. In other
[8] words, the 1 to 3 people think the chances either
[9] way are very small. The 500 to 1,000 group
[10] perceives the chances to be pretty high, and
[11] extremely high in one case, and there's plenty of
[12] psychological evidence that when you have a very,
[13] very high likelihood, in this case, of an
[14] undesirable outcome being associated with a
[15] behavior, and also being associated with not
[16] performing that behavior versus the 1 to 3, that
[17] you can see differences in how people use those
[18] pieces of information.
[19] Now, I am not actually in a good
[20] position to tell you, sitting here today, which of
[21] those two groups would be more likely because
[22] there is some evidence that people at times focus
[23] on the ratio, they say, "Oh, my God, my chances are
[24] three times as high." I definitely shouldn't do

2—17:08:57 25—17:10:00 Page 524
Krosnick
[1] this, and for example, birth defects are a good
[2] example that when the mother's age rises past the
[3] age of 40, the probability of birth defects
[4] increases by many fold. It is still a teeny, tiny,
[5] percentage, but it increases by many fold and
[6] people are very focused on that increased ratio.
[7] On the other hand, when you have got
[8] these high levels, you have to study in this case
[9] the impact of what the perceptions of the 500 to
[10] 1,000 have on people's behavior. So, in other
[11] words, I can imagine people will say, I am almost
[12] certainly going to get lung cancer regardless of
[13] whether I smoke or I don't. So that ingredient
[14] figures in. My chances are double if I smoke —
[15] that is the 500 to 1,000 people — but my chances
[16] are very high regardless.
[17] That can be an additional consideration,
[18] and I don't have an opinion, I have not done any
[19] studies of how absolute levels and relative risk
[20] levels combine in influencing. I can just tell
[21] you, holding all else constant, a higher relative
[22] risk would be associated with lower likelihood of
[23] initiating, but you are holding all else constant.
[24] Q: Right. Something else you have to look

2—17:10:06 25—17:10:55 Page 525
Krosnick
[1] at in addition to relative risk is absolute risk,
[2] correct?
[3] A: Yes. Well, I don't know that you have
[4] to, but it would be helpful, I think, to do so in
[5] trying to predict smoking onset and cessation.
[6] Q: In predicting smoking onset and
[7] cessation, in your view, you have to look at
[8] relative risk, correct?
[9] A: I didn't said have to. It would be
[10] helpful to.
[11] Q: Would it also be helpful, as you have
[12] indicated, I think, to look at absolute risk?
[13] A: Yes.
[14] Q: You can't look at either factor in a
[15] vacuum, can you?
[16] A: Yes, you can.
[17] Q: Would it be appropriate to do so in
[18] trying to predict smoking onset or cessation?
[19] A: I think it's a reasonable thing to do,
[20] sure.
[21] Q: Have you looked at absolute risks?
[22] A: I have data with regard to perceptions
[23] of absolute risks.
[24] Q: Have you done any analysis in your work

2—17:10:57 25—17:12:54 Page 526
Krosnick
[1] in this case as to absolute risk and its effect
[2] upon the smoking decision?
[3] MR. HEFTER: Objection.
[4] A: Only to the extent that we measured
[5] people's perceptions of absolute risks and those
[6] perceptions are ingredients of relative risk. So,
[7] for example, absolute risks are recorded — excuse
[8] me, perceptions of relative risks are recorded in a
[9] table in my report.
[10] Q: You state, I believe, Dr. Krosnick, in
[11] paragraph — do you have your report there?
[12] A: Yes, I do.
[13] Q: Could you turn to paragraph 43.
[14] Are you there?
[15] A: Yes.
[16] Q: You say, for a person to be accurate in
[17] understanding health risks, that person must
[18] believe that smoking definitely increases the
[19] chance of contracting some specific disease such as
[20] heart disease, lung cancer, emphysema; correct?
[21] A: Yes.
[22] Q: Secondly, must accurately recognize the
[23] extent to which a person's chances of contracting
[24] these diseases is increased by smoking; correct?

2—17:12:58 25—17:13:49

Page 527

Krosnick

(1) A: Yes.
(2) Q: And third, you must hold these beliefs
(3) with extremely high confidence.
(4) A: Yes.
(5) Q: That is your criteria for determining
(6) whether somebody has an accurate understanding of
(7) the health risks, right?
(8) A: Yes.
(9) Q: And I want to focus on item 2.
(10) A: Okay.
(11) Q: To accurately understand the health
(12) risks, the person must accurately recognize the
(13) extent to which his chances of contracting these
(14) diseases are increased; correct?
(15) A: Yes.
(16) Q: Now, are you saying that people must
(17) know how harmful smoking is in order to accurately
(18) understand the health risks?
(19) A: Yes.
(20) Q: But you also said, I think, in response
(21) to Mr. Bleakley's question that you don't know how
(22) much information somebody must have to make an
(23) informed choice about smoking.
(24) A: That's true.

2—17:13:50 25—17:14:49

Page 528

Krosnick

(1) MR. HEFTER: Objection.
(2) Q: You are not giving an opinion on that?
(3) A: That's correct.
(4) Q: But you do know, in order to be
(5) accurately informed, you must understand — you
(6) must have an accurate understanding of the extent
(7) to which the chances are increased?
(8) A: Yes.
(9) MR. HEFTER: The person's chances, it
(10) says.
(11) Q: Now, using your definition contained in
(12) paragraph 43 there as to what it takes to have an
(13) accurate understanding of health risks, can you
(14) estimate what percentage of the people in your
(15) samples that you looked at, the subscriber
(16) interviews, have an accurate understanding of
(17) health risks?
(18) MR. HEFTER: Just so we are clear, when
(19) you say subscriber interviews —
(20) MR. WILLIAMS: Depositions.
(21) MR. HEFTER: You are talking now about
(22) the depositions? You are not talking about
(23) the SRBI survey now? I just wanted to make
(24) that clear.
(25)

2—17:14:52 25—17:15:54

Page 529

Krosnick

(1) MR. WILLIAMS: I will get to that. I
(2) am not sure he has the data for that, but I
(3) will get to that.
(4) MR. HEFTER: I want just want to make
(5) clear that Professor Krosnick knows what you
(6) are asking about.
(7) Q: Let's do three questions, just to make
(8) sure.
(9) In the population as a whole, using your
(10) criteria of what it takes to have an accurate
(11) understanding of health risks, do you have any idea
(12) what percentage in the population as a whole has an
(13) accurate understanding of health risks?
(14) MR. HEFTER: Objection.
(15) Are you talking about the United
(16) States population?
(17) MR. WILLIAMS: Yes. We will get to
(18) the international population with
(19) Dr. Harris.
(20) MR. HEFTER: I am sure you will.
(21) A: I can tell you that only about 92
(22) percent of American adults currently believe that
(23) smoking increases a person's chances of contracting
(24) some specific disease, so that's the first one
(25)

2—17:15:58 25—17:17:30

Page 530

Krosnick

(1) there. Excuse me, this is all with regard to lung
(2) cancer, so let me restate this in terms of lung
(3) cancer only.
(4) About 92 percent of all American adults
(5) currently believe that smoking increases a person's
(6) chances of contracting lung cancer. Not all of
(7) those individuals hold that belief with maximum
(8) certainty, so right there, you know, we are
(9) probably down — we have not met conditions 1 and 3
(10) for, I would say, about 75 to 80 percent of
(11) Americans.
(12) Now, among the remaining group, when you
(13) say among those people who are maximally certain
(14) and who do believe that smoking increases, what are
(15) their perceptions of relative risk, then that would
(16) bring us to table 6, we would want to see the
(17) distribution of table 6, relative risks for those
(18) individuals, and furthermore, we would have to make
(19) a decision about a range of acceptability around a
(20) true number so, let's say that the true number is
(21) 13, that that is actually the relative risk of lung
(22) cancer due to this dose of smoking here. We would
(23) want to give people some credit if their number
(24) wasn't exactly 13, like if they said 13.5 or 12.5,
(25)

52434 5548

2—17:17:34 25—17:18:38 Page 531
Krosnick
(1) maybe we would give them some credit there, and so
(2) therefore, if we establish a range around 13 for
(3) that subgroup of people, we would reach some
(4) conclusion about what percentage of them meet this
(5) criterion number 2. I have not done that analysis,
(6) so I don't know what it is, but it will be
(7) considerably less than 25 percent of the American
(8) public.
(9) Q: So is it safe to say, Dr. Krosnick, that
(10) in your opinion, the vast majority of Americans do
(11) not have an accurate understanding of the health
(12) risks, as you have defined that?
(13) A: Yes.
(14) Q: Does one need to have an accurate
(15) understanding of the health risks to make an
(16) informed choice about smoking? And when I use the
(17) word "accurate understanding," I am using your
(18) criteria as you have set forth in your expert
(19) report.
(20) A: Great. I am comfortable with that.
(21) And now what you have made an amendment to the
(22) question I got earlier in my deposition when you said informed
(23) choice, and we could work through an exercise about

2—17:18:41 25—17:19:41 Page 532
Krosnick
(1) whether, you know, what is an informed choice, but
(2) if it is all right with you, I will offer the
(3) following interpretation of that phrase.
(4) I would interpret it as meaning
(5) accurately informed choice, that is, a choice based
(6) on accurate information, and if —
(7) Q: No, please don't do that, because
(8) then you have defined —
(9) A: That it is a tautology.
(10) Q: It is a tautology, so let's not play
(11) that game at 5:20 —
(12) A: No, I don't want to play a game. That
(13) is the only interpretation that I can personally
(14) come up with. If you want to offer a different
(15) interpretation of what informed choice would be,
(16) then it may become a meaningful question, but the
(17) only way I would —
(18) Q: May — I am sorry, I interrupted.
(19) May a rational person make a rational
(20) decision about smoking without knowing the accurate
(21) health risks, as you have defined them? Can you
(22) answer that question?
(23) MR. HEFTER: Objection.
(24) A: I can't for reasons that I articulated

2—17:19:36 25—17:21:15 Page 533
Krosnick
(1) during my last deposition and today, which is the
(2) term "rational" is one I cannot settle on a
(3) sensible definition.
(4) Q: So you will not be able to tell the jury
(5) how much information it is that you believe one
(6) needs to make a decision about smoking; correct?
(7) A: That's correct.
(8) Q: And you also cannot tell the jury
(9) whether people are able to make a rational decision
(10) about smoking, even despite a lack of understanding
(11) of the risks, accurate health risks, correct?
(12) MR. HEFTER: Objection.
(13) A: That's correct.
(14) Q: Do you have, Dr. Krosnick, an accurate
(15) understanding of the health risks of smoking?
(16) A: Let me answer that in the following way.
(17) I do —
(18) Q: How about yes or no first and then
(19) explain?
(20) Do you have an accurate understanding of
(21) the health risks, yes or no, and then you can
(22) explain, as you have defined it?
(23) MR. HEFTER: Well —
(24) Q: And what that means, and I will read it

2—17:21:17 25—17:22:11 Page 534
Krosnick
(1) again, you can look at it in paragraph 43.
(2) MR. HEFTER: Objection.
(3) Q: Do you believe smoking definitely
(4) increases a person's chance of contracting some
(5) specific diseases such as heart disease, lung
(6) cancer and emphysema?
(7) Is the answer yes?
(8) A: Yes.
(9) Q: Do you hold those beliefs with extremely
(10) high certainty?
(11) A: Yes.
(12) Q: Do you accurately recognize the extent
(13) to which a person's chances of contracting these
(14) diseases is increased by smoking?
(15) MR. HEFTER: Objection.
(16) A: That's the piece of it I am having
(17) trouble answering.
(18) Q: I know you are.
(19) A: And I can tell you why. I accept the
(20) scientific evidence I have seen so far on the
(21) relative risk of lung cancer. I have not spent
(22) time looking at information on relative risks for
(23) other diseases, and so therefore, I am not in a
(24) position to assess whether my beliefs about

2—17:22:13 25—17:23:17 Page 535
Krosnick
(1) relative risks of emphysema or heart disease or
(2) throat cancer or anything else is accurate or not.
(3) I will —
(4) Q: Let me ask you this question: Do you
(5) know what the relative risk is, the increased
(6) relative risk associated with smoking or heart
(7) disease?
(8) A: No.
(9) Q: Do you know what the increased relative
(10) risk is associated with smoking for emphysema?
(11) A: Let me be clear when I say no. I am
(12) using here the following standard. I have spent
(13) time looking at Surgeon General's reports and I am
(14) sensitive to the fact that these reports provide
(15) lots of information about relative risk under
(16) various conditions, and so there actually isn't
(17) necessarily a simple answer, just as in my survey,
(18) there isn't a simple answer to the relative risk of
(19) smoking yielding lung cancer, because the 13 I
(20) spoke of is specific to the dosage of 20 cigarettes
(21) a day. So, in other words, the relative risk of
(22) heart disease and emphysema varies with the dosage
(23) of smoking, just as does lung cancer.
(24) Q: Of course it does. And somebody would

2—17:23:18 25—17:24:00 Page 536
Krosnick
(1) need to know that as well to make an accurate
(2) decision, right?
(3) MR. HEFTER: Objection.
(4) A: No.
(5) Q: They don't need to know. They don't
(6) need to know the dosage? In other words, does a
(7) person need to know the increased relative —
(8) excuse me.
(9) What do you mean by accurately —
(10) recognizing the extent to which a person's chances
(11) of contracting these diseases is increased by
(12) smoking? What do you mean by that?
(13) A: I mean accurately perceive the relative
(14) risk of lung cancer given smoking.
(15) Q: And what is that, 13?
(16) MR. HEFTER: Objection.
(17) A: It's 13 for a particular dosage.
(18) Q: All right. For the same particular
(19) dosage, do you know the increased relative risk of
(20) contracting heart disease?
(21) A: There wouldn't be an increased relative
(22) risk. There would be a relative risk.
(23) Q: Thank you.
(24) A: No.

2—17:24:00 25—17:24:59 Page 537
Krosnick
(1) Q: The same for emphysema. Do you know
(2) what it would be?
(3) A: Let me be clear again. I don't know it
(4) to a standard of confidence based upon looking at
(5) documents, the way I speak about 13. In other
(6) words, I have perceptions of these things. I can
(7) tell you my perceptions just as all of the SRBI
(8) responses had perceptions, but in this interview
(9) you asked me, what is it. Being under oath and
(10) being very sensitive to needing to make statements
(11) here based on expertise, I just want to be clear, I
(12) can't as an expert offer you the correct answers to
(13) these.
(14) Q: I didn't ask as an expert. I am asking
(15) you, do you, Dr. Krosnick, have sufficient
(16) information — let me ask you this: Do you have
(17) sufficient information to make an informed decision
(18) about smoking?
(19) MR. HEFTER: What is the relevance of
(20) that as to Dr. Krosnick?
(21) MR. WILLIAMS: Hold the objections.
(22) Q: Go ahead.
(23) MR. HEFTER: I object to the question.
(24) Q: Do you have sufficient information to

2—17:25:00 25—17:25:35 Page 538
Krosnick
(1) make an informed decision about smoking?
(2) A: As I said before, I cannot define an
(3) informed decision.
(4) Q: Do you know what the relative risk is in
(5) connection with stroke for smoking?
(6) MR. HEFTER: How long was the person
(7) smoking —
(8) MR. WILLIAMS: Would you object? I am
(9) going to use the same dosage levels he
(10) started with, okay. He wants —
(11) MR. HEFTER: Then ask the question
(12) that way.
(13) MR. WILLIAMS: Absolutely.
(14) MR. HEFTER: Ask the question that way
(15) rather than generally.
(16) MR. WILLIAMS: I will ask the
(17) questions as I see fit.
(18) MR. HEFTER: You just said you were
(19) going to ask him the question based on the
(20) same dosage that he said.
(21) MR. WILLIAMS: Do you want to get him
(22) out of here?
(23) MR. HEFTER: I would, but you are
(24) asking him questions about what he

2-17:25:36 25-17:26:22 Page 539
Krosnick
(1) personally believes, which is completely
(2) irrelevant.
(3) Q: Do you know what the increased relative
(4) risk is or relative risk for a pack-a-day smoker to
(5) contract a stroke?
(6) A: No.
(7) Q: The same question for bladder cancer.
(8) A: No.
(9) Q: The same question for emphysema.
(10) A: No.
(11) Q: The same question for heart disease.
(12) A: No.
(13) Q: Do you know what the relative risk is
(14) for any dosage level for stroke?
(15) A: No.
(16) Q: Bladder cancer?
(17) A: No.
(18) Q: Emphysema?
(19) A: No.
(20) Q: Heart disease?
(21) A: No.
(22) Q: In your opinion, Dr. Krosnick, do you
(23) accurately recognize the extent to which a person's
(24) chances of contracting heart disease, lung cancer

2-17:27:16 25-17:27:33 Page 540
Krosnick
(1) and/or emphysema is increased by smoking?
(2) MR. HEFTER: Objection.
(3) A: I don't know.
(4) Q: If you will turn to paragraph 48 of your
(5) paper, please.
(6) Let me ask, and why don't you know that?
(7) A: Well, if I don't know the true values
(8) for those, I can't match my perception against the
(9) truth to assess whether I am accurate or not.
(10) Q: And so I take it, then, you don't know
(11) if you have an accurate perception of those?
(12) A: That's correct. That's why I said I
(13) don't know.
(14) MR. HEFTER: I am just going to raise an
(15) objection to that entire line of questioning
(16) for the record as irrelevant.
(17) Q: Paragraph 48, you are reviewing here
(18) polls done by the Gallup organization.
(19) Do you see that?
(20) A: Yes.
(21) Q: Those were polls you indicated earlier
(22) you had some deal of confidence in, given the
(23) status of the Gallup organization?
(24) MR. HEFTER: Objection.

2-17:27:34 25-17:28:34 Page 541
Krosnick
(1) A: Yes.
(2) Q: And the question was, down at the bottom
(3) do you see, "Do you think cigarette smoking is
(4) harmful or not," and then you track how that number
(5) has moved since 1949.
(6) Do you see that?
(7) A: Yes.
(8) Q: 40 percent in '49, 1949, and 30 percent
(9) in '54, 10 percent in '77.
(10) Do you see that?
(11) A: Yes.
(12) Q: And 5 percent in 1999.
(13) Do you have that?
(14) A: Yes.
(15) Q: Can you draw any conclusions from the
(16) fact that 5 percent of the people, the population
(17) of the United States in 1999 does not know that
(18) smoking is harmful?
(19) A: Well, I would say they do not believe
(20) that smoking is harmful.
(21) Q: Well, let's probe as to why. You are an
(22) expert, of course, on why people start to smoke and
(23) here you have 5 percent of the people thinking it
(24) is not harmful, correct?

2-17:28:35 25-17:30:01 Page 542
Krosnick
(1) A: Yes.
(2) MR. HEFTER: Objection.
(3) Q: Which is consistent, is it not, with
(4) your SRBI interview, which found 5.7 percent of the
(5) people think that it is safer to smoke, right?
(6) A: Yes.
(7) Q: Now, can you offer any opinions as to
(8) why even today we have 5 to 6 percent of the people
(9) who think that smoking is not harmful or may even
(10) be, may prevent disease?
(11) A: I can speculate, but I am not aware of
(12) direct research that has explored the issue.
(13) Q: Could you conclude that that 5 percent
(14) of people or 6 percent continue somehow to be
(15) deceived by the tobacco industry as to whether
(16) smoking is harmful?
(17) MR. HEFTER: Objection.
(18) A: No, I can't infer one way or the other
(19) of whether they are or are not deceived by the
(20) tobacco industry.
(21) Q: Can you conclude whether these people
(22) for some reason have never been exposed to
(23) antismoking messages?
(24) A: No.

2-17:30.02 25-17:31.30

Page 543

Krosnick

(1) Q: Can you speculate as to why 5 percent of
(2) the people today don't think that smoking is
(3) harmful? How can we explain that, Dr. Krosnick?
(4) A: Well, in research that I have done on
(5) matters like this, I have seen people who are
(6) skeptical about authority figures' assessments of
(7) risk in general and who sort of view scientific
(8) studies as not terribly reliable, that you can kind
(9) of — that interested parties can buy a scientific
(10) study to show anything you want. They hear
(11) conflicting messages in the news media, some from
(12) health professionals, others from the tobacco
(13) industry making opposite claims and they conclude
(14) they can't believe what experts tell them, they
(15) like to reach a judgment on their own and they may
(16) look at individuals who they have seen over the
(17) years smoking and make inferences about, for
(18) example, changes in the likelihood that smoking
(19) produces and incidences of disease, and from their
(20) personal experience, they may say, you know, the
(21) nonsmokers I know get various diseases at about the
(22) same rate that the smokers do, and so I would
(23) conclude smoking doesn't increase.
(24) Q: Thank you. Can you turn now to

2-17:31.31 25-17:32.41

Page 544

Krosnick

(1) paragraph 72, please.
(2) A: Sure.
(3) Q: Do you have that?
(4) A: Yes, I do.
(5) Q: You are talking about your results on
(6) your SRBI survey here, I believe, and you say these
(7) results clearly support the conclusion that the
(8) majority of American current and former
(9) smokers currently underestimate the increase in
(10) risk of getting lung cancer due to smoking.
(11) Do you see that? Did I read that right?
(12) A: Yes, you did.
(13) Q: Could you make the same statement if we
(14) took out the words "increase in"? In your opinion,
(15) Dr. Krosnick, does the vast majority of American
(16) current and former smokers currently underestimate
(17) the risk of getting lung cancer due to smoking?
(18) A: If you wanted to take the word
(19) "increase" out, you also have to take "due to" out
(20) and change it to, for example, "among smokers,"
(21) something of that sort.
(22) Would you like to make that change as
(23) well?
(24) Q: Yes. Go ahead. Take out "due to

2-17:32.44 25-17:33.55

Page 545

Krosnick

(1) smoking?
(2) A: Just change it to "among smokers."
(3) Q: All right.
(4) A: So now it is "The vast majority of
(5) American current and former smokers currently
(6) underestimate the risk of getting lung cancer among
(7) smokers."
(8) Q: And you believe that that would be a
(9) true statement?
(10) Let me withdraw that and ask this
(11) question, Dr. Krosnick.
(12) Do you believe that the vast majority of
(13) American current and former smokers currently
(14) underestimate the absolute risk of getting lung
(15) cancer due to smoking?
(16) A: Right. I understood it that way.
(17) In order for me to answer that
(18) question —
(19) Q: I am sorry, we have to stop for another
(20) reason.
(21) THE VIDEOGRAPHER: The time is 5:34 p.m.
(22) this completes tape number 3 of the
(23) continued videotaped deposition of Jon
(24) Krosnick.

3-17:39:45 25-17:40:54

Page 546

Krosnick

(1) (Recess taken.)
(2) THE VIDEOGRAPHER: The time is 5:40 p.m.
(3) This is tape number 4 of the continued
(4) videotaped deposition of Jon Krosnick.
(5) BY MR. WILLIAMS:
(6) Q: Dr. Krosnick, you have the opinion and
(7) you have expressed to us that the vast majority of
(8) American smokers underestimate the increase in risk
(9) of getting lung cancer due to smoking, correct?
(10) A: Correct.
(11) Q: Do you have any opinion whether the vast
(12) majority of American smokers currently
(13) underestimate the absolute risk of getting lung
(14) cancer from smoking?
(15) A: I can answer that question with a small
(16) caveat, I just want to carefully get the caveat.
(17) The caveat is — excuse me, the answer is no. The
(18) caveat is to really answer that depends upon
(19) knowing the true absolute risks, and the only
(20) evidence I have to date on the true risk comes from
(21) Kip Viscusi's analyses. I am uncomfortable with
(22) the calculation method used to generate that
(23) number, so I am interested in seeing that number
(24) calculated in a way that seems more compelling to

2—17:40:56 25—17:41:43 Page 547
Krosnick
[1] me.
[2] On the assumption that the true number
[3] is not very different from the numbers that he
[4] offered, I would answer your question no.
[5] Q: On the assumption that the number is the
[6] one he offers, which is around 13, correct?
[7] A: I remember between 5 and 10 in his
[8] writings, but —
[9] Q: I'm sorry, I stand corrected. Between 5
[10] and 10 is the absolute risk.
[11] A: Yes.
[12] Q: Do you have any reason to question that?
[13] A: Yes.
[14] Q: What do you think the absolute risk is?
[15] MR. HEFTER: Objection.
[16] A: As I say, I have not calculated it, but
[17] the reason I question it is based on his method of
[18] calculating it as he describes it in his
[19] publication.
[20] Q: How would you calculate absolute risk?
[21] A: I would need data that followed
[22] individuals over their life course, which is what
[23] we are talking about, and determine whether or not
[24] they were smokers at what dosages, and then I

2—17:43:43 25—17:44:43 Page 548
Krosnick
[1] would assess what proportion of them got lung
[2] cancer sometime during their lives. It turns out
[3] data like that are very difficult to get, and I
[4] haven't yet seen them, and so that's why I am
[5] hesitating on this. His calculation method was
[6] very different from that.
[7] Q: Is the data available to calculate
[8] absolute risk as you would like to estimate it?
[9] A: I'm sorry, say that one more time.
[10] Q: You just told us how you would like to
[11] go about calculating absolute risk, correct?
[12] A: Yes.
[13] Q: Is the data available to calculate it in
[14] that fashion?
[15] A: What I just said is, all I know so far
[16] is it's very difficult to get such data. I don't
[17] know if it is impossible yet.
[18] Q: Do you have any idea, estimate, what the
[19] absolute risk of getting lung cancer from smoking
[20] is?
[21] A: The only estimate I could generate would
[22] be Dr. Viscusi's estimate.
[23] Q: So other than Dr. Viscusi's estimate,
[24] you have no better way, on the data available

2—17:42:48 25—17:43:52 Page 549
Krosnick
[1] today, to obtain an absolute risk measurement,
[2] correct?
[3] MR. HEFTER: Objection.
[4] A: Only to my knowledge now. There may be
[5] data available today that could yield a more
[6] convincing and accurate assessment.
[7] Q: Between now and trial, do you intend to
[8] obtain better data as to what the absolute risk is
[9] of getting lung cancer? Is that one of the things
[10] you want to do?
[11] A: In general, of getting lung cancer in
[12] general?
[13] Q: From smoking.
[14] A: From smoking. It is on my agenda to
[15] continue to explore getting better figures, yes.
[16] Q: Assuming — let us assume for the moment
[17] that the absolute risk of smokers getting lung
[18] cancer is 10, okay?
[19] A: 10 percent.
[20] Q: 10 percent. Do you have an opinion
[21] whether Americans overestimate or underestimate the
[22] absolute risk?
[23] A: Some overestimate, others underestimate.
[24] Q: What percent underestimate, from your

2—17:43:55 25—17:45:05 Page 550
Krosnick
[1] figures?
[2] A: I am sorry, could you state one more
[3] time the question.
[4] Q: Assuming that the absolute risk of
[5] contracting lung cancer from smoking is 10 percent,
[6] what percent of the United States population
[7] underestimates the absolute risk?
[8] MR. HEFTER: Objection.
[9] A: It's a little hard for me to answer that
[10] because I would want to specify it with dosage, and
[11] that's part of the problem with Dr. Viscusi's
[12] number, that it doesn't specify dosage of smoking.
[13] So, in other words, if somebody smokes a pack a day
[14] for a year, they likelihood is much lower than
[15] somebody who smokes three packs a day for 30 years.
[16] I can only speak to Americans'
[17] assumptions of getting lung cancer from a pack a
[18] day for 20 years in my data described in table 5.
[19] Now, as I say, I don't —
[20] Q: Why don't you tell us what that number
[21] would be.
[22] A: And so if the correct figure is 10
[23] percent, then — this is not exactly presented
[24] quite the right way for me to answer that, but at

2—17:45:07 25—17:46:41

Page 551

Krosnick

(1) least 12 percent of Americans would underestimate,
(2) and at least 78 percent would overestimate.

(3) Q: Have you done any calculations with
(4) respect to any other disease that is associated
(5) with smoking?

(6) A: I am sorry, what is the question?

(7) Q: Have you done any calculations with
(8) respect to any other disease that is associated
(9) with smoking?

(10) A: No.

(11) Q: I am sorry, I thought you said before
(12) that 12 percent underestimated?

(13) A: At least 12 percent.

(14) Q: And 78 percent overestimated?

(15) A: At least 78 percent overestimated.

(16) Q: That doesn't add up to 100.

(17) A: That's correct. That's why I said "at
(18) least."

(19) Q: What about the other 10 percent?

(20) A: See, the way this table is formatted,
(21) table 5, which I mentioned before, you said the
(22) correct answer is 10. I can't tell from the
(23) formatting of this table exactly how many people
(24) are at 10, because the people who are at 10 percent

2—17:46:43 25—17:47:39

Page 552

Krosnick

(1) are lumped in with the people who are between 5.1
(2) percent and 10 percent. So it could be that of
(3) those 8.4 percent of people, all of them are at 10.
(4) In which case they are correct. It could be that
(5) none of them are at 10, in which case they all
(6) underestimate.

(7) Similarly, the people who are between
(8) 10.1 and 15, if — I know that 2.3 percent of
(9) people are in that range. I don't know how many of
(10) them are at 10.1. If all of them are at 10.1, that
(11) is so close to 10 that we might be inclined to
(12) round them off to 10 and say they are accurate. So
(13) that's why I had to describe it this way.

(14) In other words, there is this group of
(15) 10 percent of people who are kind of unknown, given
(16) the way this table is formatted.

(17) Q: Now, you mentioned Dr. Viscusi. Have
(18) you met Dr. Viscusi?

(19) A: Not face to face.

(20) Q: How else does somebody meet somebody?

(21) A: I have spoken to him over the phone.

(22) Q: What about Dr. Hanson, have you met

(23) Dr. Hanson?

(24) A: No.

2—17:47:39 25—17:48:50

Page 553

Krosnick

(1) Q: Have you ever spoken to him over the
(2) phone?

(3) A: No.

(4) Q: Let's go on to a few more questions
(5) about your exposure groups and your
(6) motivation-to-quit index, okay?

(7) A: Sure.

(8) Q: You have a number of variables, do you
(9) not, the first variable being regret.

(10) A: Can I ask you where the information you
(11) are getting —

(12) Q: Paragraph 90 of your report.

(13) A: Okay, I understand.

(14) Q: And then you establish a scale with
(15) respect to the regret variable and you have certain
(16) answers: Do you regret a great deal, quite a bit,
(17) somewhat, or a little. Do you see that?

(18) A: Yes.

(19) Q: And then you score those from 1 to 5.

(20) A: Yes.

(21) Q: Now, does somebody that regrets smoking
(22) a great deal have five times the regret of somebody
(23) who said he wished he never started at all?

(24) A: That isn't how this scale is treated

2—17:48:52 25—17:49:41

Page 554

Krosnick

(1) analytically. It's not a ratio scale and so —

(2) Q: It's not a ratio scale. So you can't
(3) say that somebody who got a 1 had five times the
(4) regret as somebody who got a 5?

(5) A: That's correct.

(6) Q: It is an ordinal scale; is that right?

(7) A: It is an interval scale.

(8) Q: Interval scale. What is the difference
(9) between an interval scale and an ordinal scale?

(10) A: An ordinal scale is one where each of
(11) the points you know are progressively moving from
(12) one end of a continuum to the other, so in this
(13) case we are moving from no regret to a great deal
(14) of regret.

(15) Q: That's an ordinal scale?

(16) A: That would be ordinal. It turns out
(17) some interval scales are also ordinal. An interval
(18) scale has ordinal properties plus an additional
(19) factor, which is that you can specify the distances
(20) between the points on the scale.

(21) Q: That is an interval scale, correct?

(22) A: That's an interval scale.

(23) Q: If you can specify the intervals between
(24) the various —

2—17:49:41 25—17:50:43 Page 555
Krosnick
(1) A: Points.
(2) Q: — points, you have an interval scale.
(3) A: That's correct.
(4) Q: If you cannot quantitate or quantify the
(5) differences, it is an ordinal scale?
(6) A: Generally speaking, yes.
(7) Q: So if take it then you would describe
(8) these types of responses as ordinal responses?
(9) A: No.
(10) Q: Why not?
(11) A: I would call them interval responses for
(12) the reasons I just told you.
(13) Q: You can't quantify the difference
(14) between a 1, a 2 and a 3, can you?
(15) A: Absolutely you can, as I explained
(16) earlier.
(17) Q: To me? All right, then, we will start
(18) again.
(19) Can you say that somebody who has five
(20) times — who scores a 5 has one fifth the regret as
(21) somebody who has a 1.
(22) A: Just to repeat, no, because you are
(23) speaking of ratios, not intervals.
(24) Q: What is the interval here? Don't you

2—17:50:43 25—17:51:07 Page 556
Krosnick
(1) have to quantify to have an interval.
(2) A: Yes. And — in other words, the — from
(3) many scaling studies that have been done with terms
(4) like this — extremely, very, somewhat, and so
(5) on — it is possible to quantify the meanings of
(6) each of these terms.
(7) In other words, if 100 means as much
(8) regret as a person can possibly have, and zero
(9) means no regret at all, how much regret is a great
(10) deal of regret, and that turns out to have a score
(11) of 89 or something of that sort across a large
(12) number of studies, so you can quantify the meanings
(13) of each of these terms and then treat this scale as
(14) an interval scale.
(15) It is not a ratio scale because it is a
(16) bounded interval scale ranging from zero to 100 or
(17) zero to the maximum possible —
(18) Q: I see. So what you are saying is you
(19) can take ordinal data, assign a number to it and
(20) make it an interval scale?
(21) A: Precisely.
(22) Q: What is a cardinal scale or a cardinal
(23) variable?
(24) A: I don't remember.

2—17:52:03 25—17:53:12 Page 557
Krosnick
(1) Q: You don't know what a cardinal variable
(2) is?
(3) A: I don't remember that term.
(4) Q: What about a ratio variable? Do you
(5) know that term?
(6) A: I am not — I can make an inference
(7) about what it means, which would be a variable
(8) where it is akin to a logarithmic variable where
(9) each unit movement represents ratios of two numbers
(10) to one other. Again, it is not a term I am certain
(11) of the definition of.
(12) Q: Are you familiar with the term "interval
(13) variable?"
(14) A: I have used it.
(15) Q: Today, here?
(16) A: Yes.
(17) Q: And the interval variable is what you
(18) are talking about by taking the ordinal variable,
(19) assigning a number to it and coming up with an
(20) interval variable?
(21) A: Yes.
(22) Q: Now, you calculated, sir, the means of
(23) this — you transformed — you took the averages of
(24) this motivation to quit variables: is that right?
(25)

2—17:53:18 25—17:54:15 Page 558
Krosnick
(1) MR. WILLIAMS: Let me strike that.
(2) Q: You calculated an average or a mean on a
(3) motivation-to-quit index, correct?
(4) A: Yes.
(5) Q: And that's the material, that's the
(6) numbers that you have presented in your report?
(7) A: I presented some means on that scale,
(8) yes.
(9) Q: Right. Did you present any median data?
(10) A: On that scale, no.
(11) Q: And why not?
(12) MR. HEFTER: Objection.
(13) A: There was no — it was not called for in
(14) the analyses that I did.
(15) Q: Would it be wrong, bad science, to have
(16) presented this in a median format?
(17) MR. HEFTER: Objection. Asked and
(18) answered.
(19) A: Yes, I have answered it earlier, and
(20) what I said at the time is that one could do the
(21) analysis. It is essentially never done with
(22) medians, and the median approach is a less powerful
(23) way, which would increase the likelihood you would
(24) reach inappropriate numbers from the analyses, so
(25)

2—17:54:19 25—17:55:36 Page 559

(1) *Krosnick*

(2) therefore, I didn't do it.

(3) Q: Well, I did it and I am going to show

(4) that to you.

(5) MR. WILLIAMS: What I would like to do

(6) is mark this as Exhibit 2 for identification

(7) here, if I could.

(8) *Krosnick Exhibit 2, one-page chart*

(9) headed "Medians - Individual Measure of MTQ

(10) Weighted," marked for identification, as of

(11) this date.)

(12) Q: Dr. Krosnick, I am not asking you to

(13) accept this on face value, but the purpose of my

(14) questions right now is just to examine the accuracy

(15) of our calculations.

(16) A: Sure.

(17) MR. HEFTER: For the record, I will just

(18) state an objection to this document on that

(19) ground.

(20) MR. WILLIAMS: Sure.

(21) Q: Would you agree that if these were the

(22) accurate calculations of the median from your SRBI

(23) calculations, that there would be no difference

(24) between any of the exposure groups: control,

(25) Surgeon General's tobacco, and the Surgeon General

2—17:55:40 25—17:56:34 Page 560

(1) *Krosnick*

(2) tobacco group?

(3) MR. HEFTER: Objection.

(4) Q: Just look at it for a moment.

(5) A: No.

(6) Q: You would not agree with that?

(7) A: Correct.

(8) Q: There is no difference in the medians;

(9) could you agree with that?

(10) A: Yes, I would.

(11) Q: And you could not — if you were just

(12) looking at the medians here —

(13) A: Yes.

(14) Q: And just looking at median information,

(15) you could not draw any conclusions one way or

(16) another as to what type of smoking

(17) motivation-to-quit index could be predicted by

(18) the exposure groups, correct?

(19) MR. HEFTER: Objection.

(20) MR. WILLIAMS: Let me strike that.

(21) Q: If you were just looking at median data,

(22) you could not determine any statistically

(23) significant relationships between exposure groups

(24) and the motivation-to-quit index?

(25) MR. HEFTER: Objection.

2—17:56:36 25—17:57:35 Page 561

(1) *Krosnick*

(2) A: Yes, but not for the reason I think you

(3) are trying to ask about.

(4) Q: Well, why don't you explain, please.

(5) A: As I said earlier, a median analysis is

(6) very crude. When you bring it to data like this,

(7) all it's doing is picking the point of distribution

(8) of, let's call it motivation-to-quit scores above

(9) which 50 percent of the sample is and below which

(10) 50 percent of the sample is. It completely ignores

(11) where above and where below those people are, so it

(12) is a very crude analytic tool, and so, yes, your

(13) statement is correct, you cannot reach a conclusion

(14) with confidence about any impact of these

(15) manipulations because it is such a crude analytic

(16) tool.

(17) Q: It is a crude analytic tool because I

(18) have a crude analyst sitting next to me. But just

(19) take it on face value, all right?

(20) All that being said, if you were just

(21) looking at median data, you could not draw any

(22) conclusions on the basis of your exposure groups

(23) and your motivation to quit; isn't that right?

(24) MR. HEFTER: Objection.

(25) A: Yes, and just to be clear again, I could

2—17:57:36 25—17:58:25 Page 562

(1) *Krosnick*

(2) not draw any conclusions because there is no

(3) information here from the medians alone that allow

(4) me confidence to reach any conclusion one way or

(5) another about the impact of this manipulation.

(6) Q: I understand your counsel has objected

(7) to this. You would have the information in your

(8) database to do your own calculations of medians,

(9) would you not?

(10) A: Yes.

(11) REQ Q: Could you do me the favor, sir, of

(12) between now and trial — and I know that you are

(13) going to be doing a lot more work in this case —

(14) if you could add one little thing as a favor to me,

(15) is to check the accuracy of what I have put in

(16) front of you as Exhibit 2?

(17) MR. HEFTER: We will take that under

(18) advisement of whether he is going to do that

(19) or not.

(20) You can make that request to me, don't

(21) make it to the witness.

(22) REQ MR. WILLIAMS: I am making the request

(23) on the record to the witness and to counsel

(24) that I would request that he confirm the

(25) accuracy of this, and I am going to ask him

2—17:58:27 25—17:59:42 Page 563
Krosnick

111 about it at trial, okay?

112 MR. HEFTER: We will take that under

113 advisement.

114 MR. WILLIAMS: You don't have to take

115 it under advisement. I am just telling you

116 what I am doing. It's a preview.

117 Q: Did you want to say something,

118 Dr. Krosnick?

119 A: Did you want me to take a copy of this?

120 MR. HEFTER: You don't need to take a

121 copy of it. I have a copy of it.

122 Q: Do you give you a separate copy of it.

123 No, that's not it.

124 MR. HEFTER: I have a copy of it, Jon.

125 A: Thanks.

126 Q: Have you ever — are you familiar with

127 the term "substantive statistical significance"?

128 Have you ever heard that term?

129 A: No.

130 Q: Have you ever heard the concept of once

131 you determine you might have — you do have a

132 statistically significant relationship, you should

133 also look at that relationship to determine if it

134 makes substantive sense?

2—17:59:24 25—18:00:01 Page 564
Krosnick

135 A: Yes.

136 Q: You have heard of that. Did you also

137 conduct that analysis in connection with the data

138 you were presented here?

139 A: Yes.

140 Q: Did you conclude that all of the

141 statistically significant relationships that you

142 reported made substantive sense?

143 A: Yes.

144 Q: Did you conclude that all of the

145 MR. WILLIAMS: Strike that.

146 Q: Did you control for age in your study?

147 A: I am not sure what you mean by "control

148 for" as a generic term. For example —

149 Q: Are you aware of the concept of

150 confounders?

151 A: Yes.

152 Q: Did you attempt to determine whether age

153 across your four exposure groups could have a

154 confounding effect?

155 A: Yes.

156 Q: Did you attempt to control for that?

157 A: I did control for that, yes.

158 Q: What about gender?

2—18:00:41 25—18:01:46 Page 565
Krosnick

159 A: Yes.

160 Q: What about former smoking status?

161 A: Yes.

162 Q: Did you attempt to control for the fact

163 that some people heard zero messages, some people

164 heard three and some people heard six?

165 MR. HEFTER: Objection.

166 A: You wouldn't control for those things.

167 I analyzed the effects of those things.

168 Q: So the answer is no?

169 MR. HEFTER: Objection.

170 A: Just so it is clear, it is not a

171 meaningful question in our statistical language,

172 just so you — if it is a meaningful question, I

173 misunderstood your earlier questions.

174 MR. WILLIAMS: Let's do this.

175 Adam, why don't you ask your

176 questions, if that's all right with you, and

177 I will reload, so I don't have to take any

178 time right now to break.

179 That is all right with you? I think I

180 am done, is what I am trying to tell you.

181 Actually, before I do that, let's mark

182 this as Exhibit 3 for identification. These

2—18:01:51 25—18:02:32 Page 566
Krosnick

183 are the materials we received today from

184 counsel.

185 Is that right?

186 (Krosnick Exhibit 3, multiple

187 documents received from plaintiffs' counsel

188 on March 12, 2001, 2:20 p.m., marked for

189 identification, as of this date.)

190 MR. HEFTER: Just for the record,

191 these are multiple documents, but for the

192 sake of, in the interest of time, we can

193 mark it all as one.

194 MR. WILLIAMS: Do you have more than

195 one copy there?

196 MR. HEFTER: No, but it is a

197 collection of separate, multiple documents.

198 MR. WILLIAMS: I see, about an inch

199 thick.

200 Q: Is that right, Dr. Krosnick?

201 A: Sure.

202 MR. WILLIAMS: We just got these today

203 at 2:20. We are going to take a look at

204 them, we are going to reserve our right to

205 redepose this witness prior to trial, and

206 with that, I am going to turn this over to

2—18:02:34 25—18:04:22

Page 567

Krosnick

(1) Mr. Stein and I am going to see if I have
(2) any more questions.
(3) (Discussion off the record.)

EXAMINATION BY

MR. STEIN:

(4) Q: Good evening, Dr. Krosnick. My name is
(5) Adam Stein, I represent B.A.T. Industries. I have
(6) just a couple of questions, and I appreciate the
(7) fact that you are soldiering on so late in the day.
(8) Now, included as part of what has been
(9) marked as Krosnick Exhibit 3 earlier today are
(10) copies of several newspaper articles that quote
(11) statements by various tobacco company executives.
(12) Am I right about that?

(13) A: Yes.

(14) Q: Could you just refresh my recollection
(15) as to what purpose those articles serve? In other
(16) words, what do you intend to use them for at the
(17) time in this case, if you are going to make any
(18) use of them at all?

(19) A: My purpose in looking at those documents
(20) is to improve my sense of detail about what
(21) statements were made by tobacco company employees
(22) during the last 50 years about the evidence on the

2—18:04:25 25—18:05:18

Page 568

Krosnick

(1) relationship of smoking to health.
(2) Q: Now, did you look at any other
(3) statements by tobacco company executives or is that
(4) the sole cluster of documents that you have
(5) reviewed?

(6) MR. HEFTER: Objection.

(7) I have looked at others.

(8) Q: Now, the source of these particular
(9) documents, did they come from plaintiffs' counsel?

(10) A: No.

(11) Q: How did you go about gathering them up
(12) for the purposes of this deposition?

(13) A: I sat down — well, I didn't gather them
(14) up for this deposition at all. I gathered them up
(15) on my own learning, sat down at my computer and
(16) did a search for books in the Ohio State library
(17) system based on the keyword tobacco, and that
(18) yielded a very large number of books, and I started
(19) going through them and read titles to see what
(20) seemed potentially helpful in learning about the
(21) issue I just mentioned and picked the first 12 that
(22) I came to that seemed reasonable —

(23) Q: I was not talking about the books. I
(24) was talking about the newspaper articles.

2—18:05:19 25—18:06:12

Page 569

Krosnick

(1) A: Oh.
(2) Q: How did that collection come about?
(3) A: I have been collecting my own newspaper
(4) articles on occasion. Those are the only other
(5) newspaper articles that I have. Perhaps — it
(6) could be there are some newspaper articles in what
(7) are called the exhibits that were used for the
(8) depositions taken in this case from Blue Cross-Blue
(9) Shield subscribers.

(10) Q: And you reviewed those?

(11) A: I did read the exhibits at some point.

(12) I don't remember the details of those.

(13) Q: The newspaper articles that are appended
(14) to Krosnick Exhibit 3, are those articles that you
(15) looked at from deposition exhibits or are those
(16) articles that you pulled, yourself, off the
(17) Internet or are those articles that came from
(18) plaintiffs' counsel? Do you have any specific
(19) recollection?

(20) A: All of those were provided to me by
(21) plaintiffs' counsel late yesterday evening.

(22) Q: Do you know whether or not you had seen
(23) any of those articles before?

(24) A: First of all, I have not read them all

2—18:06:13 25—18:07:16

Page 570

Krosnick

(1) carefully. The ones I looked at, I don't remember
(2) seeing, but I may have seen.

(3) Q: Did you discuss with counsel yesterday
(4) those articles?

(5) A: Yes.

(6) Q: Let me direct your attention to one of
(7) the articles which has been marked as Plaintiff's
(8) Exhibit 1862, which I will represent to you is one
(9) of the documents that is attached as part of
(10) Krosnick Exhibit 3.

(11) Let me just hand that to you and ask —

(12) MR. HEFTER: For the purposes of your
(13) examination, can I just take a look at the
(14) exhibit so I can have a copy in front of me?

(15) MR. STEIN: Sure.

(16) Q: Is that one of the articles that you
(17) discussed with plaintiffs' counsel yesterday?

(18) A: I don't remember. If it was in the
(19) packet you received, I think it's very likely to
(20) have been one that I was handed yesterday and was
(21) the subject of discussion.

(22) Q: Do you know whether that was the first
(23) time you had seen that article, yesterday?

(24) A: I think it is, but I don't know for

2—18:07:16 25—18:08:03 Page 571
Krosnick
(1) sure.
(2) Q: Now, the article that we are talking
(3) about is dated October 31, 1996, and it, apparently
(4) it is a Wall Street Journal article.
(5) Can you confirm that for me, please?
(6) A: Well, it says WSJ. I suppose that's a
(7) reasonable inference, yes.
(8) Q: Wall Street Journal?
(9) A: Yes.
(10) Q: Again, you don't know, because you had
(11) not seen it before yesterday?
(12) A: Oh, I am sorry, it says also on the,
(13) byline, "staff reporter of The Wall Street
(14) Journal," so that seems pretty likely.
(15) Q: Now you understand, sir, that this is a
(16) recoupment case that seeks to recover costs
(17) allegedly incurred by Empire as a result of
(18) subscribers smoking?
(19) A: Yes.
(20) Q: And the earliest year that Empire is
(21) speaking damages in this case is 1992.
(22) Is that your understanding?
(23) MR. HEFTER: Objection.
(24) A: Yes.

2—18:08:24 25—18:09:40 Page 572
Krosnick
(1) Q: Would you agree with me that the October
(2) 31, 1996 Wall Street Journal article could have had
(3) nothing to do with any of the smoking-related costs
(4) incurred by Empire in 1992? In other words, the
(5) subscriber who would have — it would have been an
(6) impossibility for a subscriber to have seen that
(7) article or for any claim to have been inserted in
(8) connection with any statements in that article
(9) prior to October 1996; isn't that right?
(10) MR. HEFTER: Objection.
(11) A: Could — just to be absolutely careful,
(12) if you could just restate it one more time. I
(13) think I know the answer.
(14) Q: Sure. The article is dated October 31,
(15) 1996. Empire is asserting claims in this case for
(16) costs incurred commencing back in 1992. That
(17) article contains statements by a tobacco company
(18) executive.
(19) My question to you simply is whether or
(20) not it's possible for that article to have had any
(21) impact on any claim by Empire in 1992.
(22) A: No.
(23) Q: Or 1993?
(24) A: No.

2—18:09:01 25—18:09:48 Page 573
Krosnick
(1) Q: Or '94?
(2) A: No.
(3) Q: Or '95?
(4) A: No.
(5) Q: Or even '96?
(6) MR. HEFTER: Objection.
(7) A: That's less clear.
(8) Q: And let me ask you the same question in
(9) connection with any decision by any smoker who was
(10) an Empire subscriber, the statements in that
(11) article would have had no impact on any
(12) smoking-related decision by that subscriber in
(13) 1992, '93, '94, '95, and part of 1996?
(14) MR. HEFTER: Objection.
(15) A: Correct.
(16) Q: The SRBI survey didn't ask any questions
(17) about that article, did it, to your knowledge?
(18) A: That is correct.
(19) Q: And do you know whether or not any of
(20) the Empire subscribers were asked questions at
(21) their deposition concerning that article?
(22) A: SRBI —
(23) Q: At their deposition, the deposition of
(24) the 156 deponents.

2—18:09:50 25—18:10:36 Page 574
Krosnick
(1) A: I don't know one way or another.
(2) Q: You don't know. You have looked at some
(3) of those depositions and you just don't know,
(4) sitting here today?
(5) MR. HEFTER: Objection.
(6) A: I have looked at the depositions and I
(7) will have read all of them by trial, and I have
(8) looked at the exhibits. I just don't remember
(9) vividly whether this is or is not in the exhibits
(10) used.
(11) Q: Do you have the capacity, Doctor, to
(12) analyze the impact of any one specific article in
(13) connection with any smoker-related decision?
(14) A: Yes.
(15) Q: How would you do that?
(16) A: I would conduct a laboratory
(17) experiment — obviously, it wouldn't have to be in
(18) the laboratory, but where I would expose some
(19) people to the story and others not, and observe the
(20) impact that that has on beliefs and behavior and
(21) make inferences from that.
(22) Q: Has any experiment like that been done
(23) in connection with this article, to your knowledge?
(24) A: Not to my knowledge.

<p>2—18:10:37 25—18:11:41 Page 575</p> <p><i>Krosnick</i></p> <p>[1] Q: You have not undertaken any such [2] experiment? [3] A: That's correct. [4] Q: So sitting here today, you can't say [5] whether or not any Empire subscriber has ever seen [6] this article, has ever relied on this article, you [7] have no knowledge of that; isn't that right? [8] A: That's correct. [9] Q: Just this last question. [10] In addition to this article which you [11] may or may not rely on in conjunction with your [12] testimony, there is any other B.A.T. [13] industries-related material, document or conduct [14] that you know of sitting here today that you intend [15] to rely on in giving any testimony in this case? [16] MR. HEFTER: Objection. [17] A: My understanding is that B.A.T. [18] Industries is a company that owns American tobacco [19] companies, to the extent that American tobacco [20] companies' — and I am not even sure which they [21] are, exactly — behavior is credited to B.A.T. [22] Industries, then I expect that my opinions will be [23] applicable to those companies and then would apply [24] to B.A.T. Industries. To the extent you wish to</p>	<p>2—18:12:38 25—18:13:21 Page 577</p> <p><i>Krosnick</i></p> <p>[1] A: Yes. [2] Q: Regret smoking quite a bit, you give [3] that one a 4? [4] A: No, I am sorry, no. Regret a great deal [5] gets a 1. [6] Q: I am sorry, there is some confusion on [7] that, all right. We will go the other way. [8] Regret a great deal is a 1, right? [9] A: Yes. [10] Q: Regret quite a bit is a 2, right? [11] A: Yes. Oh, sorry, let me think. [12] Yes, that's right. [13] Q: This isn't a trick. [14] A: Yes, you are right. [15] Q: Regret somewhat is a 3? [16] A: Uh-huh. [17] Q: Regret a little is 4? [18] A: Right. [19] Q: And regret not at all is 5, right? [20] A: That's right. [21] Q: And so you have assigned the same [22] quantitative differences between each one of those [23] five possible responses, right? [24] A: That's correct.</p>
<p>2—18:11:44 25—18:12:36 Page 576</p> <p><i>Krosnick</i></p> <p>[1] Keep them separate, then they would not. [2] Q: You have not made any study of the [3] corporate relation of B.A.T. Industries and any [4] other tobacco company, have you? [5] A: That's correct. [6] Q: So you don't know whether or not B.A.T. [7] Industries exercises any influence or control over [8] the conduct of its subsidiaries? [9] A: That's correct. [10] Q: You are not going to offer any opinion [11] in that regard, are you? [12] A: That's correct. [13] MR. STEIN: Thank you very much, Doctor. [14] BY MR. WILLIAMS: [15] Q: A few more, Doctor. [16] We go back to the scale and the [17] motivation-to-quit index, and we will take the [18] example of the regret variable, and you talk about [19] that in your report in paragraph 89. [20] Do you have that in front of you? [21] A: Yes, I do. [22] Q: And you have five potential responses. [23] One is regret smoking a great deal — and you give [24] that one a 5, right?</p>	<p>2—18:13:23 25—18:14:32 Page 578</p> <p><i>Krosnick</i></p> <p>[1] Q: And so you would agree with me, would [2] you not, that you have the same quantitative [3] difference between regret a great deal and regret [4] quite a bit, as you do between regret a little and [5] regret not at all? [6] A: That's correct. [7] Q: And you made the determination that the [8] quantitative measures 1 through 5 were appropriate [9] in the context of those five possible responses? [10] MR. HEFTER: Objection. [11] Q: Who made that decision? [12] A: Who made which decision? [13] Q: That you could say that the difference [14] between regretting a great deal and quite a bit, [15] for your numerical purposes, was the same as [16] saying — as the difference between regretting a [17] little and regretting not at all? [18] A: As I said earlier, after consulting a [19] large literature of dozens of studies that have [20] quantified the meanings of these terms, I decided [21] that it was reasonable to analyze the data with [22] these numerical values assigned to the verbal [23] answer choices. [24] Q: So you are the one who placed the</p>

2—18:14:34 25—18:15:40 Page 579
Krosnick
(1) numeric values with the ordinal responses?
(2) A: Yes.
(3) Q: And the same goes for all of the other
(4) categories of the going to the motivation-to-quit
(5) index, including unhappiness and like to stop and
(6) likelihood of trying to quit, correct?
(7) A: Correct.
(8) Q: You came up with the ordinal responses
(9) in all of those, is that right, and you assigned
(10) the numeric figures for each one of the possible
(11) responses?
(12) MR. HEFTER: Objection.
(13) A: I don't know what ordinal responses are,
(14) but I wrote the words in these questions —
(15) Q: You said before you did know what
(16) ordinal responses — these are ordinal, this is an
(17) ordinal measure, correct?
(18) A: It's both an ordinal and an interval
(19) measure, yes. I wrote the words that are the
(20) answer choices here and I assigned the numeric
(21) values to them, yes.
(22) Q: And so you made the decision for
(23) example, with the like to stop category, that the
(24) difference between a great deal and quite a bit
(25)

2—18:15:45 25—18:16:49 Page 580
Krosnick
(1) would be the same as the difference between a
(2) little, like to stop, and no desire to stop. That
(3) was your decision?
(4) MR. HEFTER: Objection.
(5) A: It was my decision that it would be a
(6) reasonable way to analyze these data to assign
(7) numbers in this fashion, yes.
(8) Q: And finally, with respect to your
(9) questions or your answers with Mr. Bleakley, you
(10) said that there was a lot of literature that
(11) permitted one to take responses of this nature to
(12) assign numbers to them and then to present those
(13) results in the terms of a mean or an average.
(14) Do you remember that discussion with
(15) Mr. Bleakley?
(16) A: Approximately, yes.
(17) Q: Could you just give me the three leading
(18) authorities that you would cite for that
(19) proposition?
(20) A: There really aren't authorities. The
(21) way this literature comes together is the result of
(22) my own literature gathering for a chapter that I am
(23) writing, and each of these studies, they are
(24) published in a variety of places. They are not
(25)

2—18:16:53 25—18:18:07 Page 581
Krosnick
(1) particularly famous authors, they are not
(2) particularly people who have invested a lot of
(3) effort in studying these methods, so there aren't
(4) really authorities in this area.
(5) As far as I know, I am the first person
(6) who have gathered together all of this literature
(7) and written it up and analyzed it in the way we
(8) have analyzed it to support the conclusion that I
(9) described to you. So, in other words, there are a
(10) variety of names of people who published these
(11) articles.
(12) Q: I want you to tell me, when I send the
(13) crude analyst sitting next to me back to the
(14) library to find the support for the proposition
(15) that one can take the types of responses you have
(16) and apply a numeric figure to them and then average
(17) those numbers to come up with a final mean, I want
(18) to be able to point him to the articles, the papers
(19) or whatever that would permit such data
(20) manipulations.
(21) So can you just give me what you would
(22) cite to us?
(23) A: I can answer in two ways. One is that
(24) what I have done here is in just about every single
(25)

2—18:18:12 25—18:19:01 Page 582
Krosnick
(1) publication, in every leading psychology journal —
(2) Q: That's great. Just give me three, give
(3) me the three best authorities you have.
(4) A: I am sorry, you didn't quite let me
(5) answer.
(6) Q: I'm sorry. You can give the answer, but
(7) no matter how you answer it, you can't leave here
(8) until you give me the three best authorities that
(9) you have.
(10) A: I am happy not to leave here until I
(11) answer your question. Let me answer your question.
(12) So the first answer I am giving you, if
(13) you are looking for a rationale for this approach,
(14) I am telling you that this approach is so common in
(15) psychology, for example, as a discipline, that just
(16) about any article you look at, you will see them.
(17) You could take three recent articles off of my
(18) vitae, if you would like, or three articles off of
(19) just about anybody else's vitae, open up the most
(20) recent issue of The Journal of Personality and
(21) Social Psychology and you will see articles one
(22) after another doing exactly this type of thing.
(23) Q: No.
(24) A: Now, the second answer to your question
(25)

2—18:19:03 25—18:19:59 Page 583
Krosnick
(1) is you would like to know the specific references,
(2) I believe, of three of the articles among the ones
(3) that I am referring to that have involved having
(4) people provide numeric estimates of the meanings of
(5) phrases like this which then provide the basis for
(6) this analysis.
(7) Q: And by that, I mean to convert those
(8) numeric responses, those numeric figures into
(9) averages.
(10) A: Oh, I am sorry, now I am confused again.
(11) Maybe you better restate the question.
(12) Q: What you have done as you have taken —
(13) you have an interval scale, correct?
(14) A: Yes.
(15) MR. HEFTER: Objection.
(16) Q: 1 to 5?
(17) A: Yes.
(18) Q: You got it from what are normally
(19) referred to as ordinal responses — better than,
(20) more likely than not — correct.
(21) A: I didn't follow what you just said.
(22) Q: All right, I will start again.
(23) You have a series of responses to a
(24) question like how much do you regret the smoking

2—18:20:03 25—18:21:02 Page 584
Krosnick
(1) decision.
(2) A: Yes.
(3) Q: The responses to that are "more likely"
(4) or "yes, a little bit," "yes, a lot," "right, and
(5) then what you —
(6) A: No. Those are not responses to any of
(7) my questions.
(8) Q: I will take your responses. The regret
(9) decision a great deal, quite a bit, somewhat, a
(10) little or not at all.
(11) A: Yes.
(12) Q: You then assign numeric values to those?
(13) A: Yes.
(14) Q: You then average all of those numeric
(15) values, correct, and you come up with a
(16) motivation-to-quit index?
(17) A: Yes.
(18) Q: I am asking you for the authority that
(19) states that those types of data manipulations are
(20) appropriate.
(21) A: Every research methods textbook in
(22) psychology.
(23) Q: Give me three, please.
(24) A: I am sorry to say I don't remember the

2—18:21:03 25—18:21:49 Page 585
Krosnick
(1) names and publishers of research methods textbooks
(2) in psychology that — I mean, you know, I can —
(3) there's a book by Brewer and Crano or Crano and
(4) Brewer. I don't remember what the title is and I
(5) don't know when it was published.
(6) Q: How do you spell Crano?
(7) A: C-r-a-n-o.
(8) Q: Crano and Brewer, B-r-e-w-e-r?
(9) A: Yes.
(10) Q: Textbook?
(11) A: Yes.
(12) Q: Do you recall the title?
(13) A: No, I don't remember.
(14) Q: Do you recall when it was published?
(15) A: No.
(16) Q: Do you recall who the publisher was?
(17) A: No.
(18) Q: Do you recall the color of the book?
(19) A: No.
(20) Q: Do you recall how big it is?
(21) A: No.
(22) Q: All right. Can you recall any other
(23) textbook that would point us to the support for
(24) those calculations?
(25)

2—18:21:53 25—18:22:50 Page 586
Krosnick
(1) MR. HEFTER: Objection.
(2) A: I am little not clear on, I guess, what
(3) you mean by support for it, because what I am
(4) saying to you is this is absolutely standard
(5) practice. You will find —
(6) Q: Give me an article in which they do —
(7) well, you mentioned — you have written a textbook,
(8) right?
(9) A: Yes.
(10) Q: Okay.
(11) A: It is not a textbook in social
(12) psychology, though.
(13) Q: Doesn't matter. I am looking for any
(14) support, sir.
(15) A: I don't know that it's in — I just said
(16) to you any textbook in research methods in social
(17) psychology will describe this and —
(18) Q: Have you written — did you say you
(19) wrote a textbook like this?
(20) A: No, I didn't. I am sorry, I am trying
(21) to be helpful here, but I just don't know —
(22) Q: Well, you indicated that you have
(23) written on this issue.
(24) A: If I understand the issue correctly,
(25)

2—18:22:52 25—18:23:47 Page 587
Krosnick
(1) which is assigning numbers to verbal response
(2) choices, averaging those numbers to yield and
(3) index —
(4) Q: Right.
(5) A: — I have not written a statement in any
(6) publication that says you should do that or —
(7) Q: Or you shouldn't do it?
(8) A: Or you shouldn't do it, right.
(9) Q: Okay.
(10) A: It's so commonly done, it's such a
(11) standard part of our work that it's not something
(12) that one pays close attention to in terms of
(13) authorities making an argument for
(14) It is a convention of the research that
(15) we do in our field, and if you would like me to
(16) list for you three articles that do that I am
(17) happy to list them for you.
(18) Q: Not from your CV.
(19) A: Okay. Well, then —
(20) Q: From anybody else.
(21) A: Okay anybody else. I will think of an
(22) arbitrary article.
(23) You are saying not written by me?
(24) Q: That's right. Anybody else at not you.

2—18:23:51 25—18:24:07 Page 588
Krosnick
(1) A: Okay. Here's, I guess, an easy answer.
(2) Richard E. Petty has published a large number of
(3) articles in the Journal of Personality and Social
(4) Psychology, at least one a year, probably, for the
(5) last 10 years, each of which has used an analytic
(6) approach like this, is my guess.
(7) Now, to be confident about this —
(8) Q: I am not asking for a guess.
(9) KROSNICK: Seems like you are.
(10) A: To be confident about this, I would need
(11) to look at the articles and confirm what was done
(12) in them, and I am happy to do that for you.
(13) Q: Do you recall what he has written on
(14) recently that would use this approach?
(15) A: Most of his work is on attitude change
(16) and persuasion. He has done some recent articles
(17) on correction processing.
(18) Q: Attitude change and persuasion?
(19) A: Yes.
(20) Q: In which journal?
(21) A: The Journal of Personality and Social
(22) Psychology. He also has published in a journal
(23) called Personality and Social Psychology Bulletin.
(24) Q: Anything else?

2—18:25:48 25—18:26:33 Page 589
Krosnick
(1) A: I think that answers your question.
(2) Q: Okay. Do you recall what the subjects
(3) were?
(4) A: I just told you.
(5) Q: Attitude change. With respect to any
(6) particular type of attitude or just in general?
(7) A: Well, each study was about some
(8) particular type of attitude. I don't happen to
(9) remember what they were.
(10) Q: You don't remember any particular type
(11) of attitude to help us identify these subjects that
(12) these articles —
(13) A: You will have no trouble finding it. If
(14) you do a literature search for Richard E. Petty in
(15) the Journal of Personality and Social Psychology
(16) during the last 10 years, you will find a series of
(17) articles. I cannot assure you, but I think it is
(18) likely that you will find among that set three of
(19) them that used this type of procedure.
(20) Q: And the last point, sir, you said that
(21) you have written on this subject as well, not a
(22) textbook, but you wrote an article that uses
(23) exactly the same approach, right?
(24) A: Many.

2—18:26:33 25—18:28:40 Page 590
Krosnick
(1) Q: Many. Just give me a couple, please.
(2) A: Okay. There was an article by Joann
(3) Miller and John Krosnick published in the American
(4) Journal of Political Science in 2000, line 44
(5) beginning on page 295.
(6) Q: Thank you. That's on your CV?
(7) A: Yes. You would like two more, you said?
(8) Q: Yes.
(9) A: There is an article by Penny Visser and
(10) John Krosnick published in 1998 in the Journal of
(11) Personality and Social Psychology, volume 75,
(12) beginning on page 1388.
(13) There is a chapter by Krosnick, Marayan,
(14) which is M-a-r-a-y-a-n, and Smith, published in
(15) 1996 in a book called "Advances in Survey
(16) Research."
(17) Q: Is that a textbook?
(18) A: No.
(19) Q: Have you written a textbook? Have you
(20) written any textbooks?
(21) A: Yes, I have.
(22) Q: What is the title of that?
(23) A: It's been published in a couple of
(24) different editions with different titles. When it

2-18:28:43 14-18:29:13

Page 591

[1] *Krosnick*
[2] was originally published, it was called
[3] "Introduction to Survey Research and Data
[4] Analysis." In its latest edition, it is published
[5] as "Introduction to Survey Research Polling and
[6] Data Analysis."

[7] Q: Would we find the description of the
[8] methodology in there as well?

[9] A: I don't think so. As I told you before,
[10] it's not an introductory textbook in social
[11] psychology research methods.

[12] MR. WILLIAMS: All right. That's all I
[13] have. Thank you.

[14] (Continued on following page)

[15]

[16]

[17]

[18]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

2-18:29:13 3-18:29:29

Page 592

[1] *Krosnick*
[2] MR. STEIN: Thank you, Doctor.
[3] MR. HEFTER: I have no questions at
[4] this time.
[5] THE VIDEOGRAPHER: The time is 6:30
[6] p.m., March 12, 2001. This completes the
[7] videotaped deposition of Dr. Jon Krosnick.
[8] This also completes tape number 4.
[9] (Time noted: 6:30 p.m.)

[10]

[11]

[12]

[13]

[14]

[15]

[16]

[17]

[18]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

JON A. KROSNICK

[1] Subscribed and sworn to before me
[2] this ___ day of ___, 2001.

[3]

[4]

[5]

[6]

[7]

[8]

[9]

[10]

[11]

[12]

[13]

[14]

[15]

[1]

[2]

[3]

[4]

[5]

[6]

[7]

[8]

[9]

[10]

[11]

[12]

[13]

[14]

[15]

[16]

[17]

[18]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

[26]

[27]

[28]

[29]

[30]

[31]

[32]

[33]

[34]

[35]

[36]

[37]

[38]

[39]

[40]

[41]

[42]

[43]

[44]

[45]

[46]

[47]

[48]

[49]

[50]

[51]

[52]

[53]

[54]

[55]

[56]

[57]

[58]

[59]

[60]

[61]

[62]

[63]

[64]

[65]

CERTIFICATE

[3] STATE OF NEW YORK)

[4]) ss.

[5] COUNTY OF NEW YORK)

[6]

[7] I, CARY N. BIGELOW, RPR, a Notary Public

[8] within and for the State of New York, do

[9] hereby certify:

[10] That JON A. KROSNICK, the witness

[11] whose continued deposition is hereinbefore

[12] set forth, was duly sworn by me and that

[13] such deposition is a true record of the

[14] testimony given by the witness.

[15] I further certify that I am not

[16] related to any of the parties to this action

[17] by blood or marriage, and that I am in no

[18] way interested in the outcome of this

[19] matter.

[20] IN WITNESS WHEREOF, I have hereunto

[21] set my hand this 13th day of March, 2001.

[22]

[23]

[24]

[25]

[26]

[27]

[28]

[29]

[30]

[31]

[32]

[33]

[34]

[35]

[36]

[37]

[38]

[39]

[40]

[41]

[42]

[43]

[44]

[45]

[46]

[47]

[48]

[49]

[50]

[51]

[52]

[53]

[54]

[55]

[56]

[57]

[58]

[59]

[60]

[61]

[62]

[63]

[64]

[65]

CARY N. BIGELOW, RPR

Page 593

Page 594

[1]

[2]

[3]

[4]

[5]

[6]

[7]

[8]

[9]

[10]

[11]

[12]

[13]

[14]

[15]

[16]

[17]

[18]

[19]

[20]

[21]

[22]

[23]

[24]

[25]

[26]

[27]

[28]

[29]

[30]

[31]

[32]

[33]

[34]

[35]

[36]

[37]

INDEX

[3] WITNESS EXAMINATION BY PAGE

[4] JON A. KROSNICK MR. BLEAKLEY 282

[5] MR. WILLIAMS 482, 576

[6] MR. STEIN 567

[7] INFORMATION REQUESTS

[8] REQUESTS 302, 306, 309, 323, 562

[9] EXHIBITS

[10] KROSNICK FOR ID.

[11] 1 Two-page document headed "Respondents

[12] who have according to Krosnick a relative

[13] risk of 2 0" 515

[14] 2 One page chart headed "Medians - Individual

[15] Measure of MTO Weighted" 559

[16] 3 Multiple documents received from plaintiffs'

[17] counsel on March 12, 2001 at 2:20 p.m.

[18] 566

[19]

[20]

[21]

[22]

[23]

[24]

[25]

[26]

[27]

[28]

[29]

[30]

[31]

[32]

[33]

[34]

[35]

[36]

[37]

<div>0</div> <div>05 487:8, 9</div>	<div>1980 287:13, 289:16</div> <div>1980s 322:12</div> <div>1990s 505:12, 12, 18, 20; 506:6</div> <div>1992 287:19; 290:13; 295:25; 305:20; 306:7; 571:22; 572:5, 17, 22; 573:14</div> <div>1993 505:21; 506:8; 507:2, 7; 572:24</div> <div>1994 506:8; 507:2, 8</div> <div>1996 571:4; 572:3, 10, 16; 573:14; 590:16</div> <div>1997 295:25; 305:20; 359:25</div> <div>1998 287:19; 290:13; 293:3; 295:24; 299:7; 304:21; 305:13, 18; 306:7; 590:17</div> <div>1999 292:4; 541:13, 18</div> <div>1:20 466:4</div>	<div>35 430:25</div> <div>3:07 442:14</div> <div>3:08 442:18</div> <div>3:50 476:10</div>	<div>7</div> <div>70 407:2</div> <div>71 488:21</div> <div>72 509:6, 25; 510:2, 3, 14; 511:4; 544:2</div> <div>73 299:9, 9</div> <div>75 530:11; 590:12</div> <div>76 383:15, 17</div> <div>77 541:10</div> <div>78 551:3, 15, 16</div>	<div>accepted 454:9; 462:15</div> <div>accidental 336:7</div> <div>accordance 342:10</div> <div>according 342:17; 346:25; 355:4; 363:3; 468:23; 470:2; 514:13, 17; 515:23</div> <div>account 363:2; 408:14; 410:13; 448:23, 24, 25; 449:14, 18</div> <div>accounts 417:12</div> <div>accuracy 286:14; 297:17; 315:24; 333:9; 360:4; 375:11; 388:10, 11; 390:10, 12, 18, 19; 395:9; 396:7; 425:12; 469:8; 559:14; 562:15, 25</div> <div>accurate 345:10; 388:17; 19:390:4, 15; 392:17; 394:18; 451:9; 505:13; 526:17; 527:7; 528:7, 14, 17; 529:11, 14; 531:12, 15, 18; 532:7, 21; 533:12, 15, 21; 535:3; 536:2; 540:10, 12; 549:7; 552:13; 559:22</div> <div>accurately 336:3; 344:4; 387:5; 391:10; 398:5; 469:2; 526:23; 527:12, 13, 18; 528:6; 532:6; 534:13; 536:10, 14; 539:24</div> <div>achieve 338:16</div> <div>achieving 399:15</div> <div>acknowledged 434:19</div> <div>acknowledgements 445:15; 446:15</div> <div>acquiescence 404:17, 20; 406:9, 12, 18, 25; 407:10, 14, 21; 408:3, 6, 16</div> <div>acquiring 434:22</div> <div>across 305:6, 10; 405:22; 416:14, 20; 427:24; 429:6; 445:14; 507:5; 556:12; 564:20</div> <div>actual 346:11; 469:11; 513:22</div> <div>actually 302:22; 315:20; 319:21; 338:19; 340:15; 361:16; 381:12; 385:4; 394:12; 400:7; 406:23, 24; 409:19; 427:12, 21; 428:19; 435:8, 14; 443:22, 23; 444:5; 469:25; 476:4; 482:16; 517:13; 523:20; 530:22; 535:17; 565:24</div> <div>Adam 565:18; 567:8</div> <div>add 299:23; 551:17; 562:14</div> <div>added 462:7</div> <div>addition 322:9; 345:5; 398:23; 417:4; 452:24; 453:4; 468:16; 525:2; 575:11</div> <div>additional 293:19; 327:24; 329:10, 15, 21; 331:14; 336:6; 350:24; 360:21; 462:8, 11; 503:23;</div>		
<div>1</div> <div>1 356:24; 383:8; 433:21; 462:2, 3; 515:7, 22; 523:4, 9, 17; 530:10; 553:20; 554:4; 555:15, 22; 577:6, 9; 578:9; 583:17</div> <div>1,000 519:2, 2, 9, 9; 521:4; 523:6, 10; 524:11, 16</div> <div>10 285:18; 315:2; 319:17, 24; 406:20; 423:17; 516:7, 18; 517:8; 518:3, 4; 541:10; 547:8, 11; 549:19, 20, 21; 550:6, 23; 551:20, 23, 25; 552:3, 4, 6, 12, 13, 16; 588:6; 589:17</div> <div>10, 1 542:9, 11, 11</div> <div>100 299:10, 13; 516:12; 517:24; 520:7, 20; 551:17; 556:8, 17</div> <div>100th 433:21</div> <div>10:09 303:18</div> <div>10:10 303:2</div> <div>10:15 303:21</div> <div>11:21 356:23</div> <div>11:21 357:3</div> <div>12 282:16; 283:4</div> <div>285:14, 23; 286:8; 287:25; 290:11; 291:25; 293:2; 295:10; 297:7; 298:14; 300:7; 301:17; 308:19; 421:1; 551:2, 13, 14; 589:7; 588:22; 592:6</div> <div>12:5 530:25</div> <div>12:58 410:17, 19</div> <div>12th 282:20; 284:18; 289:8; 293:11, 17; 322:19; 323:6; 327:25; 328:15; 329:8; 367:6</div> <div>13 530:22, 25; 531:3; 535:20; 536:16, 18; 537:6; 547:7</div> <div>13:5 530:25</div> <div>13th 530:13</div> <div>13 285:18; 406:24; 552:9</div> <div>136 350:18; 352:2; 573:25</div> <div>16 416:4</div> <div>17 518:21</div> <div>18 561:14</div> <div>1862 570:9</div> <div>19 428:11, 24; 430:17</div> <div>1949 541:6, 9</div> <div>1950s 322:12; 434:19</div> <div>1960s 436:22; 474:21; 475:9, 22</div> <div>1964 431:10, 17; 444:2; 446:8</div> <div>1970s 420:25</div>	<div>2 557:4; 442:15; 520:10; 522:14; 527:10; 531:6; 555:15; 559:6, 8; 562:16; 573:14</div> <div>2-point something 428:17</div> <div>2,0 514:18; 515:24; 516:6, 11</div> <div>2,0 552:9</div> <div>20 409:20; 407:4, 5; 429:20; 516:7; 535:21; 573:14</div> <div>2000 292:4; 452:5; 475:2; 590:5</div> <div>2001 292:4; 566:7; 592:6, 14</div> <div>25 283:15; 294:16, 23; 390:8, 14; 581:8</div> <div>250 517:8, 25</div> <div>28 383:9</div> <div>293 520:6</div> <div>2:20 431:8; 466:6, 7; 569:23</div> <div>2:23 411:3</div>	<div>5</div> <div>5 462:3, 4; 515:6; 541:13, 17, 24; 542:9, 14; 543:2; 547:8, 10; 550:19; 551:22; 553:20; 554:5; 555:21; 576:25; 577:20; 578:9; 583:17</div> <div>5,1 552:2</div> <div>5,7 542:5</div> <div>50 291:9; 366:9; 402:17; 431:24; 432:2, 23; 440:21; 516:12, 22; 517:10; 561:9, 10; 567:25</div> <div>500 517:17; 518:25; 521:6, 17; 523:6, 10; 524:10, 16</div> <div>51 363:22; 365:23</div> <div>51,9 363:19, 25; 364:12</div> <div>52 345:25</div> <div>54 346:2; 541:10</div> <div>57,5 364:17</div> <div>5:01 515:20</div> <div>5:20 532:12</div> <div>5:34 545:22</div> <div>5:40 546:3</div>	<div>8</div> <div>8,4 552:4</div> <div>80 530:11</div> <div>80-plus 403:9</div> <div>89 476:18; 556:12; 576:20</div>	<div>9</div> <div>90 314:25; 315:5; 318:14, 20; 319:9; 553:13</div> <div>92 529:22; 530:5</div> <div>93 573:14</div> <div>94 573:2, 14</div> <div>95 573:4, 14</div> <div>96 573:6</div>	<div>A</div> <div>a.m 303:19, 22; 356:24; 357:4</div> <div>ability 338:20; 347:23; 387:7; 462:19</div> <div>able 296:9, 14, 16; 297:2, 5; 300:6; 304:2; 305:17; 306:9, 11; 308:19; 314:7, 12; 321:15, 17, 21, 22; 325:22; 347:15; 390:23; 533:5, 10; 581:19</div> <div>above 383:19; 561:8, 11</div> <div>absolute 423:2, 3, 10, 12; 425:24; 426:3; 433:6, 20; 522:12, 18, 25; 523:8; 524:20; 525:2, 13, 22, 24; 526:2, 6, 8; 545:15; 546:14, 20; 547:11, 15, 21; 548:9, 12, 20; 549:2, 9, 18, 23; 550:5, 8</div> <div>absolutely 319:12; 382:4; 400:5; 493:5; 499:22; 538:14; 555:16; 572:12; 586:5</div> <div>abstract 392:19</div> <div>abundance 498:8</div> <div>academic 292:7</div> <div>accept 352:22; 412:4; 534:20; 559:13</div> <div>acceptability 530:20</div> <div>acceptable 491:14</div> <div>acceptance 401:14</div>	<div>accepted 454:9; 462:15</div> <div>accidental 336:7</div> <div>accordance 342:10</div> <div>according 342:17; 346:25; 355:4; 363:3; 468:23; 470:2; 514:13, 17; 515:23</div> <div>account 363:2; 408:14; 410:13; 448:23, 24, 25; 449:14, 18</div> <div>accounts 417:12</div> <div>accuracy 286:14; 297:17; 315:24; 333:9; 360:4; 375:11; 388:10, 11; 390:10, 12, 18, 19; 395:9; 396:7; 425:12; 469:8; 559:14; 562:15, 25</div> <div>accurate 345:10; 388:17; 19:390:4, 15; 392:17; 394:18; 451:9; 505:13; 526:17; 527:7; 528:7, 14, 17; 529:11, 14; 531:12, 15, 18; 532:7, 21; 533:12, 15, 21; 535:3; 536:2; 540:10, 12; 549:7; 552:13; 559:22</div> <div>accurately 336:3; 344:4; 387:5; 391:10; 398:5; 469:2; 526:23; 527:12, 13, 18; 528:6; 532:6; 534:13; 536:10, 14; 539:24</div> <div>achieve 338:16</div> <div>achieving 399:15</div> <div>acknowledged 434:19</div> <div>acknowledgements 445:15; 446:15</div> <div>acquiescence 404:17, 20; 406:9, 12, 18, 25; 407:10, 14, 21; 408:3, 6, 16</div> <div>acquiring 434:22</div> <div>across 305:6, 10; 405:22; 416:14, 20; 427:24; 429:6; 445:14; 507:5; 556:12; 564:20</div> <div>actual 346:11; 469:11; 513:22</div> <div>actually 302:22; 315:20; 319:21; 338:19; 340:15; 361:16; 381:12; 385:4; 394:12; 400:7; 406:23, 24; 409:19; 427:12, 21; 428:19; 435:8, 14; 443:22, 23; 444:5; 469:25; 476:4; 482:16; 517:13; 523:20; 530:22; 535:17; 565:24</div> <div>Adam 565:18; 567:8</div> <div>add 299:23; 551:17; 562:14</div> <div>added 462:7</div> <div>addition 322:9; 345:5; 398:23; 417:4; 452:24; 453:4; 468:16; 525:2; 575:11</div> <div>additional 293:19; 327:24; 329:10, 15, 21; 331:14; 336:6; 350:24; 360:21; 462:8, 11; 503:23;</div>
<div>3</div> <div>3 442:19; 521:11, 18; 522:2, 6; 523:4, 5, 9, 17; 530:10; 545:23; 555:15; 565:25; 566:5; 567:12; 569:15; 570:11; 577:16</div> <div>30 283:15, 18; 284:7; 294:16, 23, 23; 390:8, 15; 541:9; 550:16</div> <div>300,000 299:7</div> <div>31 283:19; 571:4; 572:3, 15</div> <div>33 517:14</div> <div>34 476:17, 18</div>	<div>3 442:19; 521:11, 18; 522:2, 6; 523:4, 5, 9, 17; 530:10; 545:23; 555:15; 565:25; 566:5; 567:12; 569:15; 570:11; 577:16</div> <div>30 283:15, 18; 284:7; 294:16, 23, 23; 390:8, 15; 541:9; 550:16</div> <div>300,000 299:7</div> <div>31 283:19; 571:4; 572:3, 15</div> <div>33 517:14</div> <div>34 476:17, 18</div>	<div>6</div> <div>6 530:17, 18; 542:9, 15</div> <div>60 507:20; 508:3</div> <div>62 288:10</div> <div>63 288:10, 10</div> <div>64 288:10</div> <div>65 407:4, 5</div> <div>68 291:22; 508:20</div> <div>69 291:22</div> <div>6:30 592:5, 9</div>				

517:8, 9; 522:21; 524:18;
554:19
addressed 414:16
addressing 297:25
adequate 311:25; 312:3;
5:424:12
adhere 354:14
adjust 385:21
adjustments 360:17, 19
admirable 375:4
admissions 452:6;
475:15
adolescent 404:22;
505:6, 15; 506:3; 507:4
adolescents 507:8
adopted 371:19; 372:19
adult 361:14; 394:23
adults 441:23; 24;
497:25; 529:23; 530:5
advance 300:22; 302:17;
469:4
Advances 300:16
advertisements 475:6
advertising 494:6, 13
advisement 302:4, 5;
562:18; 563:4, 6
advisory 433:25
advocate 353:22; 354:12
affect 344:21; 347:23;
353:19; 356:6; 393:18;
440:12
affected 438:16; 499:21
affirmative 433:4, 6, 8,
11, 25
afforded 331:4
afraid 292:5; 298:11
AFTERNOON 411:2;
466:5, 7; 515:7
afterwards 341:2
again 284:24; 287:22;
289:9; 304:23; 304:8, 9;
307:15; 308:5; 316:24;
318:6; 320:9; 323:14, 15,
17, 24; 343:18; 345:7, 22;
348:9; 349:16, 15; 351:15;
362:16; 384:20; 365:11;
374:6; 389:4; 407:25;
410:6; 414:24; 430:22;
433:8; 439:19; 459:24;
461:4; 462:11; 465:9;
473:11; 483:19; 496:19;
500:4; 502:6; 505:3;
512:11; 514:2; 537:4;
555:19; 557:11; 560:25;
571:11; 583:11, 25
against 379:7, 14;
390:22; 443:16; 444:12;
446:11; 474:13; 483:10,
15, 24; 540:9
age 306:5; 344:4, 11;
345:24; 361:14; 406:24;
407:2, 2; 524:3, 4; 564:13,
19
agenda 408:11; 549:15
agendas 408:12

ages 407:5
aggregated 308:14
aggregation 483:24
ago 283:2; 317:4; 327:5;
359:25; 389:22; 390:4, 7,
8, 15; 402:24; 412:20;
440:22; 463:19; 469:18;
470:13; 487:4; 489:5;
503:13; 522:20
agree 332:18; 333:12, 22;
334:2; 367:10; 397:12;
404:25; 405:5, 5, 5, 23;
406:2, 2, 3, 5; 420:2;
431:5; 432:18, 19; 471:17;
504:16, 23; 505:19, 22;
506:9, 12, 22, 23; 507:16;
520:6; 558:21; 560:6, 9,
572:2; 578:2
agreed/disagree 404:23
agreed 396:25; 491:23;
506:19, 28; 522:10
agreement 299:2; 405:4
ahead 500:20; 508:12;
503:19; 510:24; 513:20;
537:23; 544:21
aid 394:23
aids 392:13
aimed 419:13
akin 340:4; 557:9
alarmist 341:2
alerted 416:22
alerting 307:23
alike 507:13
allegedly 571:18
allow 295:16; 308:21;
520:2; 562:3
allows 309:9; 313:3;
385:25; 410:4
almost 282:24; 372:21,
22, 23; 524:12
alone 370:25; 371:2, 17;
464:2; 473:13
along 291:20; 353:25;
465:20; 473:13
alter 331:7; 441:9; 464:12
altered 441:11; 443:24,
25
alternative 298:4, 23;
385:9
although 360:15; 370:11;
401:3
altogether 461:12
always 317:11; 349:7, 8,
354:18; 356:2; 372:21, 22,
23; 459:23; 468:17, 18
amended 412:3
amendment 412:4;
531:23
America 436:22
American 288:18; 296:8;
321:20, 24; 322:24;
324:20, 22; 325:8, 11;
326:10; 351:24; 361:14,
15; 363:12, 12, 14; 425:18,
441:16; 444:16; 448:22;

452:4, 14, 23; 453:19, 22,
23; 454:19, 20; 501:5;
509:8, 15; 510:8, 9;
529:23; 530:5; 531:8;
544:9, 16; 545:6, 14;
546:9, 13; 575:19, 20;
590:4
Americans 322:3;
338:10; 440:22; 444:3;
530:12; 531:11; 549:22;
550:17; 551:2
among 286:21; 331:20;
344:24, 24; 345:16;
349:24; 406:10; 466:21;
482:12; 483:6; 497:25;
503:16; 530:13, 14;
544:21; 545:3, 7; 583:3;
589:19
amount 470:13; 495:8;
514:3
amounts 424:24
analog 475:21
analogies 474:19
analogous 475:9, 10
analyses 301:19, 21;
302:23; 304:23; 305:8;
327:24; 328:2; 329:6;
330:25; 351:5; 352:6;
379:18, 23; 434:4, 10;
459:14; 461:15; 468:7;
489:25; 501:25; 546:22;
558:15, 25
analysis 283:6; 295:20;
297:11, 15; 298:22; 301:5,
12; 305:10; 328:14; 330:9;
341:22; 342:17; 350:20;
353:16; 385:11; 415:22;
416:13; 417:12; 438:16;
439:12, 16; 449:17, 20;
450:5, 12, 25; 451:6;
452:23; 453:3; 454:2, 7,
13, 25; 455:10; 456:5;
459:16; 461:6; 463:15, 15,
24; 465:3, 10; 466:4, 17,
17, 25; 467:12, 19; 468:4,
6, 7, 10, 18; 469:23;
476:20; 477:20; 478:4;
479:15; 480:3, 7; 481:4;
485:6, 9; 487:2; 490:3, 13,
15; 503:13; 525:25; 531:6;
558:22; 561:5; 564:4;
583:7; 591:4, 6
analyst 346:24; 561:18;
581:14
analytic 561:12, 15, 17;
588:6
analytically 554:2
analyzable 477:16
analyze 412:24; 415:12;
461:16; 574:13; 578:22;
580:7
analyzed 283:9; 287:16;
289:25; 299:5; 347:11;
380:5; 455:21; 565:10;
581:8, 9
analyzing 336:5; 480:5
and/or 540:2
Anonymity 377:4, 379:7,

13; 380:10; 399:22
answerable 490:9
answered 297:13; 307:4;
309:10; 359:9; 362:17;
402:4; 457:2; 473:10;
558:19, 20
antismoking 420:4;
493:20; 542:24
anymore 418:10
apologize 304:9
apparently 405:21;
571:4
appear 375:4; 395:21;
403:11, 12; 406:7; 416:16;
475:19; 514:8
appearance 394:17
appears 315:25; 316:3;
407:3; 427:14
appended 569:14
appendix 366:16
applicable 575:24
application 320:2
apply 575:24; 581:17
appreciate 567:9
approach 298:2, 16, 23;
299:14; 380:20; 413:18;
414:25; 415:6, 6; 416:5,
19; 558:23; 582:14, 15;
588:7, 15; 589:24
appropriate 362:20;
461:9; 467:24; 479:15;
481:6; 525:18; 578:9;
584:21
approximate 478:2
Approximately 283:12,
15; 294:19; 352:8; 440:22;
580:17
approximates 313:9
approximation 298:2
approximations 436:9
arbitrary 300:13; 338:8;
587:23
area 319:5; 418:2, 5;
496:10, 13; 502:15; 581:5
areas 491:13
argument 587:14
around 307:18; 411:8;
530:20; 531:3; 547:7
arrive 425:10
arsenic 375:25
article 285:19; 315:18;
420:7; 440:13; 570:24;
571:3, 5; 572:3, 8, 9, 15,
18, 21; 573:12, 18, 22;
574:13, 24; 575:7, 7, 11;
582:17; 586:7; 587:23;
589:23; 590:3, 10
articles 287:20; 288:15;
290:15; 323:7, 9, 11, 13;
358:24; 359:12; 481:11;
501:4; 567:13, 18; 568:25;
569:5, 6, 7, 14, 15, 17, 18,
24; 570:5, 8, 17; 581:12;
19; 582:18, 19, 22; 583:3;
587:17; 588:4, 12, 17;
589:13, 18

articulated 532:25
ascertain 336:12
aside 365:20; 415:21
aspect 400:9
aspects 330:5; 334:20;
411:21; 498:9
asserted 402:25
asserting 572:16
assertion 401:15;
406:17; 443:16, 18,
447:13; 481:14, 15
assertions 403:15;
406:6; 436:16; 437:3;
439:25; 441:14, 17;
444:10; 445:7, 9; 446:4;
452:7; 475:4, 17
assess 297:12; 371:16;
372:12; 402:12; 457:17,
19; 474:12; 534:25;
540:10; 548:2
assesses 370:23
assessing 298:17;
346:24; 348:20; 372:7;
388:15; 390:18; 480:9
assessment 348:25;
351:3; 352:9; 378:11;
424:20; 549:7
assessments 345:11;
433:14; 543:7
assign 556:20; 580:7, 13;
584:13
assigned 372:4; 577:22;
578:23; 579:10, 21
assigning 368:13;
557:20; 587:2
assistant 294:11
associated 358:5; 489:7;
520:4; 522:19; 523:15, 16;
524:23; 535:7, 11; 551:5, 9
association 349:14;
453:22, 23
assume 393:20; 419:16;
431:23; 453:17; 477:13;
501:7; 549:17; 559:14
assuming 420:5; 469:22;
549:17; 550:5
assumption 392:10;
431:21; 465:20, 25; 547:3,
6
assumptions 550:18
assure 589:18
attached 302:10, 13;
570:10
attempt 373:21; 508:11;
564:19, 23; 565:5
attempted 508:7, 14
attempting 372:17
attention 416:22; 417:4;
475:4; 497:11; 501:15;
570:7; 587:13
attentive 327:12, 12;
416:17
attitude 441:13; 473:16;
20; 588:16, 19; 589:6, 7, 9,
12

attitudes 360.10; 375.3;
384.19; 387.20; 388.2;
389.9; 390.3, 14, 20, 24;
391.10, 15; 393.14, 23;
394.4; 395.2, 18; 399.2;
413.13
attorney 408.12; 449.7
attorneys 408.7; 410.3;
6; 414.2, 9; 445.13
attributable 371.2;
509.23, 23; 511.3, 5
attributes 320.14
Audits 310.8, 14, 17;
311.14; 312.19; 313.3, 5;
6; 24; 314.2; 331.19;
369.16; 370.10
author 358.10
authorities 452.12;
453.10; 580.19, 21; 581.5;
582.4; 9; 587.14
authority 452.8, 9;
492.20; 543.7; 584.19
authors 292.15; 357.25;
358.7; 359.24; 581.2
available 298.20; 309.19;
19; 21; 518.8, 14, 25;
519.6
average 427.2, 6, 7, 9;
128.11; 430.14, 15, 16;
339.17; 583.3; 580.14;
581.17; 584.15
averaged 429.5
averages 557.24; 583.10
averaging 583.7
avoid 354.20; 375.13, 17;
376.14; 377.8; 382.19, 25;
401.5; 396.22, 23; 407.21
avoided 397.2, 5, 9;
413.20
avoiding 380.9
aware 288.24; 289.2, 18;
289.39; 340.21; 400.11,
17, 24; 401.5, 9; 402.18,
24; 403.23; 496.2, 7;
498.2; 502.19, 20, 21;
507.9, 12, 14; 542.12;
543.18
awareness 400.2, 7, 8,
18; 401.12, 19; 402.23;
403.14; 415.15

B

base 386.13
baseball 405.14, 15;
418.22
based 307.13; 317.2;
323.20; 341.14, 16;
378.18; 416.7; 417.11;
426.4, 22; 428.20; 430.13;
436.4; 437.5; 459.15;
461.14; 532.6; 537.5;
538.20; 547.18;
568.18
baseline 333.6, 20;
474.19
basically 465.21
basis 298.16, 22; 296.6;
299.23, 23; 300.22;
312.14; 307.25; 308.23;
309.7; 311.322.2, 9, 12;
324.24; 325.5; 327.3, 4;
334.14; 348.11, 25;
349.13; 351.17; 352.6;
353.17; 357.3; 383.18;
388.15; 424.24; 426.3, 18;
431.8; 436.12; 439.11, 15,
18; 561.22; 583.6
bat 302.7
batch 283.5
became 288.24
become 289.2; 305.9;
317.3; 406.12; 532.17
began 291.10; 354.24;
454.13
begin 335.18; 411.6;
480.2
beginning 406.14;
484.19; 600.6, 13
behalf 422.10
behave 398.24
behaving 410.2
behavior 292.10; 383.20,
21, 25; 384.10, 10, 18, 24;
385.15, 18; 386.4; 391.16;
393.23; 398.17, 21; 399.5,
6; 403.25; 407.11; 409.19;
426.11; 433.21, 23; 435.9,
15, 25; 493.9, 14; 497.4, 8,
20; 503.25; 506.15;
522.23; 523.16, 17;
524.11; 574.21; 575.22
behavioral 396.5, 8
behaviors 360.9; 375.2;
399.18; 433.10, 17, 18;
435.19, 22; 496.4
behind 424.7
belief 384.5; 400.2, 25;
401.20, 25; 403.8; 415.15,
473.17, 21; 474.17;
512.19; 530.8
beliefs 375.3; 382.10;
383.19; 384.4; 385.21;
387.15; 388.2; 389.9;
390.3, 14, 20, 24; 391.10,
15; 393.14, 23; 394.4;
395.2, 17; 399.2; 403.5,
12, 17, 24; 440.19; 441.5,
10; 443.14; 445.20;
459.17, 21, 25; 464.12;
494.22; 495.17, 18, 19;
498.17; 513.17; 527.3;
534.10, 25; 574.21
believes 392.2; 516.21;
539.2
believing 401.7; 468.12
belong 363.10
below 561.9, 11
besides 359.12; 451.18
best 326.19; 335.9, 12;
369.23; 370.4; 389.16;
417.8; 436.9; 582.4, 9
better 392.8; 482.19;
512.10; 548.25; 549.9, 16;
583.12, 20
beyond 488.22; 498.24
bias 336.2; 352.18, 24;
353.2, 4, 13, 16, 20, 21,
24; 354.4, 7, 10, 20, 22,
24; 355.2, 18, 20, 21, 22,
25; 356.3, 4, 5, 9, 10, 11,
18, 18; 357.7, 13, 14, 20;
358.5, 14, 18, 25; 359.4, 7,
22; 360.14, 16, 23; 374.21,
24; 375.14, 17, 23; 376.4,
8, 11, 22, 24; 377.10, 14,
20; 378.6, 14, 17; 379.8,
15, 19; 380.6, 10; 381.9,
16, 17; 382.15, 20; 383.2;
386.17, 19, 22; 387.15, 20;
388.20; 389.10, 13, 20, 25;
398.2; 404.17, 20; 406.9,
12, 18, 19, 25; 407.10, 10,
14, 15, 17, 21; 408.3, 6,
16; 409.5, 9, 11, 14, 17;
410.5, 9, 11; 411.22;
413.3; 456.25; 457.15
biased 353.7; 399.21
bidding 521.21
big 517.14; 585.21
birth 524.2, 4
bit 290.24; 355.14; 400.3;
454.6; 476.24; 478.7;
553.17; 577.3, 11; 578.5,
15; 579.25; 584.5, 10
bladder 539.8, 17
BLEAKLEY 282.7;
291.23; 292.20; 296.11;
302.2, 5; 303.10, 16, 23;
306.25; 307.11, 21;
309.16, 21; 323.10, 14;
324.6; 336.24; 343.21;
350.10; 357.6; 367.14;
383.13; 408.21; 410.15;
411.11, 16; 419.15; 420.8;
421.24; 433.7; 439.4;
442.12, 21; 447.18; 448.3;
470.20; 476.9, 15; 482.3;
491.9; 580.10, 16
Bleakley's 527.22
blind 355.11
Blue 287.18; 290.13;
295.23; 296.2; 301.7, 10,
304.15, 16, 20; 305.5, 7,
13, 18; 329.7; 331.20;
350.19, 25, 25; 351.2, 8,
17, 487.13, 16, 18; 488.25;
489.10, 15; 569.9
body 315.17; 385.5, 24;
435.17; 477.24
bogus 380.16, 18
bolster 331.16
bone 556.4
book 290.2; 292.12;
585.4, 19; 590.16
books 292.3, 7, 8;
568.17, 19, 24
both 291.7; 308.9; 351.7;
363.4; 377.6; 406.6;
408.8; 410.6; 437.11, 12;
516.15; 579.19
bottom 516.11; 541.3
bounded 556.17
brand 315.18
break 303.7, 24; 328.6;
356.21; 463.17; 476.7;
482.9; 565.21
Brewer 585.4, 5, 9
bridge 308.7; 323.25
briefcase 383.12
bring 315.11; 416.12;
426.6; 530.17; 561.6
bringing 441.17
brings 401.22; 414.9;
424.18; 507.11
broken 300.11
Bschorr 284.11
build 345.6; 460.13
built 372.2
Bulletin 588.24
bureau 297.16; 298.19,
20; 299.11
buried 309.22
buy 543.10
byline 571.14

C

C 282.2; 411.4
C-r-a-n-o 585.8
calculate 362.19;
363.21; 364.14; 366.4;
458.21; 462.21; 513.6, 18;
547.21; 548.8, 9, 14
calculated 363.18, 23;
25; 364.7, 9, 11; 423.13;
427.15; 428.16, 19; 509.2;
511.22; 546.25; 547.17;
557.23; 558.3
calculating 312.10;
362.25; 458.25; 547.19;
548.12
calculation 314.23;
363.10, 15, 16; 364.19, 23;
365.8; 463.15; 484.3, 5;
546.23; 548.6
calculations 551.4, 8;
559.15, 22, 23; 562.8;
585.25
California 500.24
call 288.20; 292.8;
298.23; 310.5, 19; 361.25;
363.13; 364.23; 365.15;
372.8; 409.4, 4; 413.21;
414.15; 435.8; 466.20;
555.12; 561.8
called 282.2; 292.12, 14;
310.14, 18; 311.11, 13,
312.12, 17, 19; 334.11;
340.2, 342.21; 348.14;
360.14; 366.8, 10; 374.20;
380.14, 16; 381.9, 24;
382.12; 393.2; 397.14;
404.17; 410.4; 413.23;
463.6, 11; 495.24, 25;
508.11; 558.14; 569.8;
588.24; 590.16; 591.2
caller 311.11
calling 313.7; 364.25
calls 310.10, 15; 331.19;
354.22
came 305.21; 308.22;
415.4; 500.18; 568.23;
569.18; 579.9
Camel 292.13
can 287.21; 291.21;
292.6, 11, 18, 21; 293.7;
294.8; 302.7; 303.2, 8, 12;
306.20; 307.18; 309.17;
25; 315.15; 325.14, 25;
326.2, 19; 331.25; 332.17;
334.2; 335.11, 11; 336.3,
21; 337.4, 5, 16; 342.22;
343.6; 344.6; 346.17;
350.3; 353.5, 9, 16, 19;
354.3, 23; 357.19; 358.16,
25; 359.12; 364.4; 365.11;
366.4; 368.10; 369.23;
370.4, 20, 21; 381.17;
383.11; 386.13; 388.25;
389.16; 396.23; 398.5, 11;
399.10, 12, 12, 18; 401.8;
402.4, 6; 404.24; 409.17;
19; 417.9; 418.13; 419.21;
424.23; 425.11; 428.13;
434.9, 13; 436.10; 437.17;
438.18; 439.19; 440.8, 15;
464.23; 470.8, 21; 477.5;
482.15, 17, 18; 487.7;
492.21; 493.3, 15, 16;
494.3; 500.8; 502.4;
503.11, 13; 504.9; 510.5,
20; 511.9; 514.12; 518.20;
520.6, 19; 521.13; 522.18;
523.18; 524.12, 18, 21;
525.16, 17; 528.14;
529.22; 532.14, 22;
533.22; 534.2, 20; 537.7;
541.16; 542.8, 12, 22;
543.2, 4, 9, 10, 25; 546.16;
550.17; 553.11; 554.20,

24; 555:15, 16, 20; 556:9,
13, 20; 557:7; 562:20;
566:11; 570:14, 15; 571:6;
581:16, 22, 24; 582:7;
585:3, 23
cancel 410:12
cancer 329:22; 339:7;
344:18, 22, 23; 345:2;
377:16, 22; 423:16, 18;
425:20; 426:8, 10; 427:4,
10, 22; 428:2, 7, 12; 429:9,
17; 430:13, 15; 432:4, 8;
436:25; 446:9; 448:22,
452:14, 23; 453:19;
508:11; 514:19;
516:3, 518:2, 4, 5, 24, 25;
519:6, 10, 13, 21; 520:8,
16, 23; 521:10; 524:13;
526:21; 530:3, 4, 7, 23;
534:11; 535:3, 20, 24;
536:15; 539:8, 17, 25;
544:11; 545:7, 16;
546:10, 15; 548:3, 20;
549:10, 12, 19; 550:6, 18
candidate 338:9, 12
candidate 371:22
capacity 574:12
capture 491:15
cardinal 556:23, 23;
557:2
care 391:24
cared 482:12
careful 349:25;
406:21; 427:23; 572:12
carefully 413:7; 416:17;
437:23; 494:8;
546:17; 570:2
case 282:11, 19, 24;
283:13, 25; 285:21;
286:23; 287:21; 289:6,
14; 291:16, 18, 295:11;
296:5, 20; 299:5, 13;
302:14; 303:16; 314:20;
315:2; 317:24; 320:21;
329:20; 332:15; 346:12,
21; 347:12; 350:18;
352:10; 353:15; 363:8;
370:14; 371:20; 372:3, 24;
384:2, 10; 385:5;
404:24; 405:2; 410:7;
415:12; 417:15; 422:7, 10;
428:5; 430:18; 434:18;
436:2; 437:25; 438:15;
447:5; 449:1; 462:16;
468:3; 474:7; 486:21;
493:13; 500:13; 513:24;
514:5; 523:12, 14; 524:9;
526:2; 527:6; 534:14;
562:13; 567:20; 569:9;
571:17, 22; 572:16;
575:16
cases 338:17; 344:8;
372:2; 376:13, 15, 18;
166:15
cataloged 412:23
categories 350:23;
193:15; 494:10; 579:5
categorize 493:25

category 285:12; 405:11;
490:4; 495:21; 579:24
causal 403:23; 422:4;
436:5; 507:24
causation 421:21; 422:2
cause 377:15; 475:24
caused 508:25
causes 322:5; 344:18;
401:20; 421:6, 7; 435:25;
436:17, 25; 437:7; 440:3;
446:9; 469:19; 470:12;
475:5, 25; 507:15
causing 339:7; 398:25
caveat 546:17, 17, 18, 19
census 297:16; 298:19,
19; 299:11
Center 295:5; 358:4
Centers 295:5
certain 330:22; 336:22;
337:23; 343:35; 349:9;
393:18; 397:3; 414:8;
435:11; 436:10;
439:8; 445:3; 457:21;
519:4, 5, 507:23; 525;
520:5; 530:14; 553:16;
557:11
certainly 313:12; 386:11;
409:24; 421:2; 425:11;
443:20; 457:18; 474:24;
489:24; 524:15
certainty 365:15; 386:3;
419:6; 428:12; 447:2, 7;
512:7, 8, 9, 13, 14, 19;
519:19; 520:3; 530:9;
534:11
cessation 475:17;
501:13; 525:6, 8, 19
chain 403:24
challenge 404:24
chance 370:25; 371:2,
17; 372:18; 411:14;
423:17; 520:20; 526:20;
534:5
chances 344:22; 434:21;
469:8; 523:13; 524;
524:15, 16; 526:24;
527:14; 528:10; 429:24;
530:7; 534:14; 536:11;
539:25
change 286:9; 424:14;
441:13; 442:12; 443:14;
473:17, 17, 17, 18, 20, 21,
21, 21; 544:21, 23; 545:3;
588:16, 19; 589:6
changed 442:22; 445:20
changes 445:14; 543:19
changing 440:21; 445:18
chapter 580:23; 590:14
character 406:8
characteristic 423:14,
22
characteristics 287:18;
297:18; 298:7, 9, 18;
299:15; 330:13, 15; 331:3,
5; 334:10; 409:20; 443:12
characterization 324:5

characterized 324:3;
426:9
chart 559:8
check 335:7; 343:6, 14,
20; 350:9, 12; 351:9, 14;
428:13; 456:10; 562:15
checked 337:12
checks 342:22, 24;
343:17; 345:21, 23;
346:22; 350:5
child 492:8, 17, 19;
493:15; 494:23, 24; 495:2
children 419:12; 440:4,
13, 24; 441:2, 23; 493:18,
21
children's 494:6
choice 371:12, 14;
413:23; 527:24; 531:17,
25; 532:2, 6, 6, 16
choices 404:21, 24;
405:9, 12, 17; 477:19, 22;
478:20; 578:24; 579:21;
587:3
choose 381:21; 426:2
chooses 381:18
chose 452:8
chunk 452:4
cigarette 297:24; 322:5;
344:17; 396:3; 402:19;
419:12; 423:14, 17; 446:9;
464:8; 493:18; 541:4
cigarettes 327:2; 344:21;
366:20; 375:24; 384:5;
434:21; 437:11; 456:16;
478:6; 494:25; 535:21
circulated 327:8
circumstances 382:9,
13; 480:12
cite 496:9; 580:19;
581:23
claim 305:13; 308:11;
351:21; 439:24; 502:12;
572:8, 22
claimants 287:18;
290:13
claims 295:23, 25;
304:21; 305:18; 306:6, 24;
502:13; 543:14; 572:16
clarification 325:14, 18
clarify 324:14; 334:17,
21; 443:5; 498:25
clarifying 369:12
clear 295:3; 299:20;
310:20; 311:19; 316:24;
324:10; 364:10, 20;
384:15; 408:4; 411:7;
412:18; 415:8; 447:19;
459:10; 475:20, 24;
490:16, 20; 502:11;
505:10; 509:10; 513:21,
24; 528:19, 25; 529:6;
535:12; 537:4, 12; 561:25;
565:13; 573:8; 586:3
clearly 441:13; 544:8
clients 470:18
close 301:8; 356:20,

414:4; 439:4; 488:21;
552:12; 587:13
closely 300:24
closely-related 421:5
closer 299:12; 476:3;
482:18
clothing 409:22
cluster 568:5
co-vary 371:19
coded 350:22
coder 410:12
coders 355:11; 408:13
coding 350:18, 24; 352:2,
3; 353:16, 18; 355:10;
410:14; 412:23; 413:13;
414:17
codings 352:11; 478:4
cognitive 382:2, 6;
492:5, 14; 494:19, 20;
495:11, 14, 21
collapsed 352:5
collect 297:20; 330:19
collected 287:13;
297:22; 317:14; 318:3;
344:12, 13; 346:25;
347:10; 468:23; 505:18
collecting 569:4
collection 348:12; 353:6;
355:4; 566:16; 569:3
colloquial 363:6; 369:25
colloquially 364:25
color 585:19
combination 304:11, 12;
485:12; 486:14
combine 461:23; 464:21;
465:4, 15; 469:9; 471:13;
472:4; 485:10; 524:21
combined 300:15, 17;
463:13, 20
combines 468:10
Combining 463:23
comfort 495:18
comfortable 531:21
coming 308:24; 320:13;
435:2; 436:23; 557:20
commencing 572:17
comments 464:6
Commission 287:11;
289:17
Commit 420:18
committee 443:25
common 318:25; 319:2,
5, 7; 413:22; 480:24;
481:17; 582:15
commonly 414:25;
481:12; 587:11
community 442:6; 443:2;
451:2, 11
companies 292:10;
296:7; 322:2, 4, 10;
327:15; 434:19; 437:2;
439:25; 440:5; 441:14, 19;
445:16, 18; 451:23;
469:18; 471:3; 474:8;
575:20, 21, 24

company 339:10;
435:13; 436:18; 469:12;
567:14, 24; 568:4; 572:18;
575:19; 576:5
comparable 301:14;
452:17; 462:14; 464:17;
522:19
comparatives 344:19
compare 297:11; 298:8,
18; 465:16; 469:11, 25;
470:15; 471:2; 473:8;
483:10; 485:11; 488:24;
521:7
compared 300:16;
305:5; 314:24; 358:12;
360:2; 392:18; 464:3;
465:5, 6; 483:14; 486:14
compares 423:21
comparing 297:15;
360:7; 447:24; 482:11
comparison 300:13;
330:13; 351:4; 449:5;
451:9, 14; 466:9; 467:24;
469:9; 472:6; 483:7, 23;
486:13
comparisons 315:22;
451:15, 16; 464:24;
466:21; 474:9
compelling 546:25
compensate 360:18
competent 340:8; 504:9
complete 313:7; 370:12
completed 366:23, 25
completely 307:4;
325:23; 337:8; 422:19;
444:4; 539:2; 561:10
completes 356:24;
442:15; 545:23; 592:6, 8
complex 368:6
complicated 492:4
components 328:22;
374:25; 490:22
composition 297:11
compromise 319:9;
462:18; 478:22
compromised 368:5
compromises 319:15
computation 328:24
compute 366:7; 371:13
computed 328:19;
372:12
computer 487:20;
568:16
concentrating 470:8
concept 416:7; 509:20,
22; 511:2, 4; 512:12, 13,
18; 563:21; 564:16
conceptually 477:22
concern 432:15; 444:8
concerned 302:15;
357:13; 444:17; 451:15
concerning 573:22
concerns 403:12
conclude 358:18;
425:16; 441:19; 469:2;

509:7, 542:14, 22; 543:14,
24; 564:7, 11
concluded 369:12;
436:16
concluding 325:6
conclusion 301:18;
350:3; 385:25; 465:14;
531:5; 544:8; 561:13;
562:4; 581:9
conclusions 331:6;
352:9; 360:23; 417:2;
436:13, 15; 452:19;
459:18; 481:3; 482:14;
541:16; 560:15; 561:22;
562:2
conclusive 455:17
complete 324:14
condition 466:22, 24;
473:21
conditions 376:5;
397:15; 406:10; 434:23;
435:12; 466:21; 467:9;
468:18; 475:18; 480:8, 14;
530:10; 535:17
conduct 330:9; 345:21;
361:13; 378:20; 412:5, 7,
9, 12; 416:2; 417:16;
564:4; 574:17; 575:14;
577:1
conducted 301:20, 22;
325:3; 317:19; 332:18;
333:13, 23; 334:8, 9;
343:17; 350:6, 13; 354:3,
12; 361:10; 378:18; 388:2;
415:23; 416:11; 417:5;
430:11, 24; 440:14; 507:6
conducting 318:13;
334:25; 337:6; 353:22;
373:6; 451:6; 458:25;
462:3
conferences 288:6;
291:3
confidence 299:3, 19,
21; 300:2; 305:12; 330:4;
349:18; 350:4; 352:13;
398:20; 417:10; 427:16;
505:19; 527:4; 537:5;
540:23; 561:14; 562:4
confident 283:17;
565:22; 588:8, 11
confidentiality 377:5;
379:11, 12; 380:11
confidentially 336:21;
341:6
confined 417:4
confirm 443:14; 562:24;
571:6; 588:12
conflicting 543:12
conform 341:23; 354:19
conforming 342:16
conforms 324:15; 482:2
confounders 564:17
confounding 564:21
confuse 338:5
confused 486:22;
510:11; 583:11

confusion 483:20; 491:8;
577:7
conjunction 575:12
connect 397:24
connection 322:16;
342:22; 343:18; 350:14;
357:8; 361:2; 362:7, 10;
369:4, 16; 370:16; 375:18;
379:3, 8, 13; 380:6; 381:3;
6; 382:16, 20, 25; 384:11,
390:21; 391:18; 393:22;
397:16; 407:20; 409:9, 12;
415:11, 14, 23; 417:17;
538:6; 564:4; 572:9;
573:10; 574:14, 24
conscious 381:23;
400:13
consequences 403:8;
16; 419:44; 20; 441:2, 3, 8,
18; 24; 444:8; 495:17, 19;
497:14; 498:18; 499:4, 5;
504:6; 21; 505:5, 14;
506:2; 507:3, 15
consider 286:13; 363:7;
418:15; 431:20; 451:5;
461:4; 491:10
considerably 487:9;
531:8
consideration 426:5;
460:22; 522:12; 524:18
considerations 335:17;
523:2
considered 299:13;
502:8
consist 287:9
consistency 342:21, 24;
343:13; 17; 20; 344:10, 14,
15; 345:3, 5, 16, 17, 21,
23; 346:21, 23; 347:3;
348:3, 9; 416:19
consistent 330:18;
343:7; 345:20; 406:17;
408:11; 418:6; 439:24;
440:13; 442:24; 507:4, 5;
512:4
consistently 387:9;
405:22; 506:14
constantly 365:7
consists 351:14
constant 468:24; 512:12,
13, 18; 524:22, 24
construct 333:10
constructs 435:24
consult 283:16; 488:2
consulted 289:8
consulting 578:19
Cont'd 411:15
contained 375:24;
528:12
containing 290:15
contains 288:5; 572:18
contentious 424:7
context 333:5; 408:8;
414:9; 435:6; 436:10;
445:23; 452:7, 10; 465:6;
466:16; 469:4; 578:10

contexts 361:25; 362:2,
451:25
continuation 282:11;
497:19; 498:11; 501:13,
19, 22; 502:25; 503:3;
504:3, 3
continue 290:3; 322:8;
326:13; 331:14; 401:18;
421:6; 491:12; 494:3;
502:10; 503:8; 542:15;
549:16
continued 491:22;
545:24; 546:4; 591:14
continuum 349:7; 462:6;
554:13
contract 423:15, 18, 23;
428:7; 539:6
contracting 422:23;
423:6; 426:10; 526:20, 24;
527:14; 529:24; 530:7;
534:5, 14; 536:12, 21;
539:25; 550:6
contradictory 405:24
contrast 494:10
Control 293:5; 380:21;
463:6, 21; 464:3; 465:5, 6,
12, 19; 466:10, 11, 12;
471:13; 472:4, 18; 473:25;
483:10, 14, 24; 484:17;
485:11, 18; 486:15;
559:24; 564:13, 14, 23, 24;
565:5, 9; 576:8
controlling 463:23
controversial 494:8
convenience 490:21
convenient 356:22
convention 341:7;
587:15
conventional 318:6, 13,
21, 24
conventions 342:16, 18
converge 348:23, 24;
349:4, 10, 12, 15
convergence 349:7;
352:2
convergent 348:14, 18;
349:20, 21, 22; 350:12;
351:3, 4, 9, 14; 352:10, 13;
398:18
conversation 369:8
converse 497:20
conversely 321:7
convert 583:8
convinced 305:9;
427:15; 446:4
convincing 385:5;
441:15; 443:19; 549:7
copies 306:3, 9, 11,
392:15; 411:12; 567:13
copy 289:21, 25; 290:3;
307:9; 383:6, 10; 563:10,
12, 12, 13, 15; 566:14;
570:15
corporate 576:4
corrected 510:8; 547:10
correction 588:18

correctly 335:9; 397:19;
402:16; 479:7; 586:25
correlation 371:13;
383:19
correlations 328:21;
329:2; 385:9
correspondence
299:17, 18
costs 430:2, 571:17;
572:4, 17
counsel 283:21; 284:6;
294:20; 296:20; 329:7;
422:9; 455:3, 6; 514:23;
562:6, 23; 566:3, 6;
568:10; 569:19, 22; 570:4,
18
count 313:16
counted 296:18; 313:12,
22
counterfactual 397:15,
23
country 295:19; 297:12,
18; 300:17; 305:6; 327:10;
402:18; 431:9, 16; 434:24;
451:3
couple 292:11; 295:6;
300:11; 332:22; 358:8;
367:23; 371:6; 377:12;
402:4; 404:9; 456:12;
567:9; 590:2, 24
course 316:23; 343:3;
392:2; 413:25; 414:8;
435:15; 445:5; 451:14;
535:25; 541:23; 547:23
court 419:4
coverage 291:13; 331:15
Crano 585:4, 4, 7, 9
create 384:8; 495:20
created 410:9; 488:12
credible 441:21; 452:7,
11
credit 530:24; 531:2
credited 575:22
criteria 361:11; 527:6;
529:11; 531:19
criterion 371:8; 531:6
criticism 417:22
criticizing 417:15, 25
Cross 290:13; 304:21;
305:18; 308:6; 323:25;
329:7; 351:2, 8; 476:6
Cross-Blue 287:18;
295:23; 296:2; 301:7, 10;
304:15, 17; 305:5, 7, 14;
331:20; 350:19, 25; 351:2,
18; 487:13, 16, 19; 489:2,
10, 16; 569:9
crucial 440:18
crude 561:6, 12, 15, 17,
18; 581:14
current 298:5, 9, 21;
299:16; 301:7; 304:15, 16;
305:14; 330:15; 331:5;
339:10; 357:18, 19; 363:4;
425:18; 430:4, 11; 451:23;
462:8, 22; 464:9; 484:21,

24; 485:24; 486:10;
489:11; 490:3, 7, 12;
491:2; 509:10, 12, 16;
510:9; 544:9, 17; 545:6, 14
currently 297:23;
425:19; 430:12; 509:16;
529:23; 530:6; 544:10, 17;
545:6, 14; 546:13
Curtin 358:2
customarily 312:21
customary 312:11;
318:6, 13, 21, 24
cut 513:20
CV 587:19; 590:7

D

damages 571:22
danger 320:4, 21;
407:14; 445:11
dangerous 384:6;
400:25; 401:10, 11;
402:25; 403:2, 6, 16;
440:23
data 283:7; 287:12, 16;
289:16; 293:3; 295:16, 17;
297:16; 298:10, 19, 20;
299:6, 11, 14, 17, 18;
300:7, 11; 301:8; 304:3;
306:23; 308:8, 12; 315:24;
316:5, 25; 317:12, 12, 13;
318:2; 319:16; 328:9, 17;
330:19, 25; 331:2; 335:23;
336:6, 21; 337:4; 341:21,
21, 23; 342:17; 344:11, 15;
346:22, 24; 347:10, 20;
348:13; 355:6; 355:4;
361:8; 372:18; 411:24;
412:24; 431:3, 8, 16;
434:11; 438:8; 487:14;
490:10; 505:17; 515:2;
520:2; 525:23; 529:3;
547:22; 548:4, 8, 14, 17,
25; 549:6, 9; 550:19;
556:20; 558:10; 560:21;
561:6, 21; 564:4; 578:22;
580:7; 581:20; 584:20;
591:3, 6
database 514:16; 562:8
date 506:9; 515:25;
546:21; 559:11; 566:8
dated 571:4; 572:15
day 282:15; 429:20;
535:22; 550:14, 16, 19;
567:10; 592:14
deal 399:3; 405:19;
424:7; 451:16; 476:24;
478:7, 12, 14; 540:23;
553:17, 23; 554:14;
556:11; 576:24; 577:5, 9;
578:4, 15; 579:25; 584:10
DeBacco 294:3
debate 327:9; 424:8
decades 342:11; 358:3;
440:21; 507:6
deceived 542:16, 20
decide 349:17; 367:24;

479:14 decided 298:2; 578:21 decision 353:20; 381:23; 398:10; 401:18; 402:8, 14; 424:2, 11, 16, 22, 25; 425:4, 8, 15; 426:5, 19, 21; 493:3; 494:9, 14; 526:3; 530:20; 532:21; 533:7, 10; 536:3; 537:18; 538:2, 4; 578:10, 13; 574:14; 578:12, 13; 579:23; 580:4, 6; 581:10 decisions 326:12; 329:16; 332:25; 333:2; 353:2; 424:23; 425:13; 433:11 decrease 336:20; 388:11 decreases 388:17, 19 defect 340:8; 361:17 defects 524:2, 4 defendant 291:16; 422:11; 443:2; 455:11 defending 481:15 defensive 355:3 define 312:4; 316:23; 333:2; 424:12; 447:8; 503:3, 4; 538:3 defined 333:14, 16; 412:13; 423:4, 11; 426:11; 491:14; 503:5; 531:13; 532:9, 22; 533:2 defining 315:16 definitely 389:5; 447:12; 498:4; 523:25; 526:18; 534:4 definition 524:12, 16; 326:8, 14; 336:23; 338:2; 343:19; 347:19; 350:8; 356:4, 10; 369:25; 370:2; 373:19; 385:17, 19; 400:17, 18; 406:21; 423:4; 424:8; 499:18; 528:12; 533:4; 577:12 definitional 491:18 definitively 338:19 degree 385:13; 386:2, 8; 405:3; 444:8; 419:5; 438:12; 446:25; 447:6; 451:4; 467:5 delighted 524:16 delivered 373:7 delivery 463:19 demand 344:10; 474:10 demande 426:12 demographic 287:17; 290:12; 320:20, 22; 298:7, 8, 18; 299:15; 308:8; 320:6, 11; 330:13, 14, 22; 331:3, 4 demographics 360:7, 11 demonstrative 290:19 Denise 496:12 depart 417:8 depend 337:8; 345:22 dependent 372:8; 435:7; 436:11; 461:18, 20	depends 361:24; 362:23; 373:5, 388:5; 546:19 deponent 393:12, 21, 24; 394:2, 9, 25; 395:24; 413:5, 8; 415:9 deponent's 396:4, 8 deponents 287:15; 290:9; 393:3; 409:23; 412:24; 573:25 deposed 287:16; 309:3; 4, 310:21; 311:8, 9; 312:8, 314:17; 370:13 deposition 282:11, 15; 16; 283:2; 285:8, 9, 22; 286:7; 287:25; 290:10; 293:12; 294:25; 297:9, 10; 298:13; 299:21; 300:2; 302:8, 10; 313:17, 21; 307:15, 22; 308:4, 20; 313:4; 318:14; 320:20; 322:23; 323:15, 17, 24; 340:14; 347:342:6, 9; 350:7, 14; 353:15; 356:25; 357:5; 358:10; 359:4, 8, 16; 375:18; 379:25; 380:7; 381:6; 382:25; 383:7, 8; 388:8; 391:18; 401:23; 404:2, 8; 407:23; 408:9; 409:12, 25; 412:16; 414:24; 420:24; 412:16; 20; 500:19; 531:24; 533:2; 545:24; 546:5; 568:13, 15; 569:16; 575:22; 581:24; 592:7 depositions 283:9; 288:20; 313:23; 316:4; 314:23; 329:19; 350:19; 24; 391:23; 398:4; 408:5; 413:11, 22; 414:21; 415:4; 434:25; 435:3; 439:23; 528:21; 529:9; 574:4, 7 describe 289:9; 292:6; 304:8; 305:25; 309:7; 315:8; 317:5; 333:9; 349:9; 362:5; 366:13, 15; 370:20; 381:11; 434:16; 459:12; 490:20; 552:14; 553:18; 554:18 described 283:14; 289:4; 290:8, 21; 304:6; 7; 306:21; 315:25; 328:4; 329:2; 344:3; 350:18; 352:2, 5; 369:7; 374:15; 392:19; 394:16; 550:19; 581:10 describes 547:19 describing 287:12; 317:7; 336:18; 495:12 description 361:19, 23; 369:11; 591:7 descriptions 291:11; 306:4 descriptive 413:25 design 332:25; 333:2; 335:24; 338:16; 341:13; 20; 361:6; 411:21; 412:4; 12; 415:25; 416:2; 417:15; 419:22; 473:22; 474:10 design's 462:19	designed 332:19; 333:10, 13, 23; 334:8; 336:11; 337:10; 341:9; 347:2; 411:25; 412:21; 435:5; 460:20; 499:17 designing 334:25; 336:10; 337:6; 339:24; 341:3; 355:7; 368:11; 387:24 designs 338:23 desirability 374:21, 24; 375:14, 17, 23; 376:4, 8, 10, 22, 24; 377:10, 14, 20; 378:6, 14; 379:8, 15, 19, 24; 380:3, 6, 10; 381:15, 16; 456:25 Desirable 318:8, 9, 11; 380:22; 407:11 desire 301:13; 339:11; 436:2, 20; 451:24; 459:6, 8; 580:3 desires 353:19 despite 406:6; 533:11 detail 296:9; 305:25; 321:20; 322:20; 362:2; 501:17; 567:23 detailed 322:9; 417:12 details 306:22; 309:2; 313:7; 318:4; 332:5; 362:3; 370:12; 416:18; 487:10; 502:13, 14; 569:13 detect 462:19; 468:21 detecting 469:8 determinants 403:17, 20, 20; 461:3 determination 402:6; 578:8 determinations 490:25 determine 335:13; 346:11; 379:23; 402:3; 404:3; 457:4; 470:11; 487:23; 560:22; 563:22, 24; 564:19 determined 547:24 determining 316:8; 491:10; 492:8, 17, 19; 502:8; 527:6 develop 296:18; 297:2; 300:6; 305:17; 308:2, 19, 314:7, 12; 321:15, 17 developed 295:10; 296:22; 322:19; 324:8; 378:11; 418:10 developing 305:24; 307:13; 323:22; 373:19; 428:4 development 342:23 devices 498:3 Dewey 286:22; 287:4, 8, 14, 25; 288:14; 289:20; 290:6; 293:2, 13; 294:5, 10; 306:16; 329:11; 331:22 dichotomous 404:24 Dick 496:24	differ 300:23; 351:18; 488:19; 499:9; 512:6; 523:7 difference 319:13; 320:22; 321:2, 4, 9; 330:18; 357:11; 370:24; 372:13; 381:25; 382:5; 400:2, 6; 407:6; 422:25; 423:9; 445:4; 464:5, 13, 14; 465:8, 11, 21, 24; 467:4, 8, 13, 20; 468:15, 19; 471:8, 18, 22, 25; 472:7, 11, 13, 13; 474:16, 18; 479:25; 484:10; 485:16, 18; 486:7, 10; 488:10, 15; 509:20; 511:2, 554:9; 555:14; 559:23; 560:8; 578:4, 14, 17; 579:25; 580:2 differences 320:6; 360:20; 370:20; 374:17; 471:15; 477:14; 480:13; 487:24; 489:14; 523:18; 555:6; 577:23 different 299:11, 14; 314:4; 320:18; 338:7, 14, 17; 348:21; 352:7; 356:13, 15; 366:3; 372:5, 6; 373:4; 376:17, 17; 382:7; 386:7; 388:3; 400:8; 401:7; 402:5; 405:22; 413:9; 416:25; 417:2; 423:8; 435:4; 440:18; 458:11, 14, 16, 17; 466:23; 467:18, 23; 468:7; 469:7; 473:19; 474:6; 478:11, 13, 17; 479:11; 480:7, 8; 484:18; 486:19, 20, 22; 487:6; 490:25; 497:22, 24; 498:6, 14; 499:8; 512:5; 513:8, 13, 18; 514:7; 522:18; 532:15; 547:4; 548:7; 590:25, 25 differently 318:19; 333:20; 388:24; 411:23; 413:13, 14, 17; 414:21; 465:3; 479:3 difficult 396:20; 548:4, 17 difficulty 461:8; 469:15 digit 343:15 diminish 387:8 direct 514:25; 542:13; 570:7 direction 397:5; 408:17, 19 directions 408:13; 410:10 directly 344:20; 425:17; 457:17, 25; 460:23 disadvantages 481:2 disagree 334:2; 404:25; 405:6, 6; 406:2, 2, 4; 432:20; 504:17, 23; 505:19, 23; 506:9, 12, 22 disagreeing 431:7 disagreement 405:4; 478:20 discipline 582:16	discourage 451:3 discourages 353:12 discouraging 493:25 discrepancies 330:17; 346:9; 347:4 discrete 401:4 discuss 515:11; 570:4 discussed 355:16; 357:17; 395:22; 396:24; 397:11; 409:2, 3, 6; 420:23; 424:6; 455:6; 500:19; 570:18 discussing 324:18 discussion 426:12; 442:17; 482:25; 507:11; 515:19; 567:4; 570:22; 580:15 Disease 293:5; 401:20; 437:8; 469:19; 470:12; 526:20, 21; 529:25; 534:6; 535:2, 8, 23; 536:21; 539:12, 21, 25; 542:11; 543:20; 551:5, 9 diseases 526:25; 527:15; 534:6, 15, 24; 536:12; 543:22 displays 289:5, 13, 15 dispositions 380:21 dispute 413:2 disqualified 311:2 dissonance 382:3, 6, 12, 14; 384:8 distances 554:20 distinct 481:2 distinction 400:5; 401:12; 418:25; 493:11; 507:12 distinguish 434:4 distort 353:9; 360:23 distorting 408:7 distracted 400:14; 482:16 distraction 470:8 distribution 520:3; 530:18; 561:7 distributions 301:11; 350:21; 373:7 diverge 349:25 divergence 349:24 divide 428:23 Doctor 574:12; 576:14, 16; 592:2 document 288:3, 9; 289:7; 291:8; 302:22; 322:15; 393:8, 21, 24; 394:2, 10, 12, 16, 22, 25; 395:3, 5, 8, 10, 12, 18, 24, 25; 396:2, 7, 10, 515:22; 559:18; 575:14 documented 503:24 documenting 440:19 documents 288:13; 293:19; 302:11, 12; 306:2, 3; 326:12; 392:15, 18, 22, 23, 24; 393:10; 411:9;
--	--	---	---	--

478:18; 503:23; 537:6;
566:6, 10, 16; 567:22;
568:5, 10; 570:10
domain 494:21
Donald 421:9; 422:3, 6,
10
done 282:19, 22; 283:6,
7; 284:18; 289:16; 293:4,
16; 295:15; 297:11, 15;
298:3, 6; 299:7; 303:4;
310:8; 313:18; 319:6, 7;
321:12; 327:20, 24;
328:15; 330:25; 335:8;
340:9; 341:22; 342:6, 8,
10; 343:17, 19; 349:2;
360:7, 16, 18; 369:11-13;
370:12; 382:24; 388:6, 15,
16; 390:9, 18; 396:13;
397:5; 404:7; 411:23;
413:18; 414:20, 24, 25;
415:13; 417:17, 23; 418:4;
421:10; 435:5; 443:24;
446:17; 461:15; 465:3;
466:10; 470:9; 480:14;
481:12; 483:19; 484:3, 5,
6; 485:6, 9, 10; 486:22, 24;
487:13; 499:21; 503:14;
522:13; 524:19; 525:25;
531:6; 540:19; 543:5;
561:4, 8; 556:4; 558:22;
566:23; 574:23; 581:25;
583:13; 587:11; 588:12,
13
dosage 535:21, 23;
536:7, 18, 20; 538:10, 21;
539:15; 550:14, 18
dosages 547:25
dose 530:23
double 520:16; 524:15
down 338:4; 406:24;
489:23; 516:10;
530:10; 541:3; 568:14, 16
dozen 292:3
dozens 454:16; 500:4;
501:2
Dr 282:8; 293:23; 303:24;
325:18; 411:17; 442:20;
492:7; 483:5; 516:3;
526:11; 529:20; 531:10;
533:23; 537:16, 21;
539:23; 543:4; 544:16;
545:12; 546:7; 548:23, 24;
550:12; 552:18, 19, 23, 24;
559:12; 563:9; 566:19;
567:2; 592:7
dramatic 347:4
draw 385:19; 337:16, 17;
347:13; 355:23; 372:18;
435:16; 541:16; 560:15;
561:21; 562:2
drawn 331:6; 360:24;
413:12
driven 409:15, 17
dropped 400:11
dropping 400:23
due 329:22; 371:18;
383:20; 426:8, 10; 530:23;
544:11, 18, 20, 25; 545:16;

546:10
duly 282:3
during 289:6, 14; 297:9;
299:7, 20; 328:6; 343:3;
393:3; 404:8; 408:18;
416:11; 420:24; 423:18;
435:15; 436:22; 440:21;
445:5; 463:17; 533:2;
548:3; 567:25; 589:17

E

E 588:3; 589:15
e-mail 308:25; 309:12;
362:11
earlier 283:4; 295:18;
299:23; 304:7; 312:5;
314:1; 328:16, 18;
332:16; 355:15; 357:17;
23; 359:23; 367:7; 372:19;
385:10; 388:9; 398:19;
409:3; 411:9; 433:13;
433:25; 437:2; 499:20;
506:7; 507:12; 519:18;
533:21; 540:22; 555:17;
558:20; 561:5; 565:16;
567:12; 578:19
earliest 521:21
ease 336:3
easy 506:22; 588:2
edition 515:18; 591:4
editions 590:25
education 419:3
educational 419:11
effect 373:16; 374:8;
448:10; 19; 20; 453:25;
464:18; 466:19; 469:2, 8;
526:2; 564:21
effective 499:23, 25;
500:6
effectively 419:22
effectiveness 499:9;
500:2
effects 322:15; 327:11;
432:16; 434:5; 454:5;
462:20; 494:23; 507:10;
565:10
effort 300:18; 412:22;
428:5; 581:4
efforts 335:23; 450:25;
498:2
eight 513:15
either 288:6; 291:12;
312:17; 346:3; 354:3;
375:2; 378:2; 381:17;
437:12; 466:25; 477:5;
523:9; 525:15
Eleanor 357:25
elected 338:10
election 338:11, 13
elections 371:12
element 332:5, 10, 11;
335:20; 367:11; 381:15;
21; 408:5
elements 335:24; 368:7;

8
elicit 460:21
eligible 312:8; 365:4;
366:13; 369:19, 22, 25;
370:9
eligibles 369:17
eliminated 414:13
else 283:10; 284:13, 15;
285:10, 11, 13; 286:2;
292:17, 18, 24; 293:14;
294:8, 12, 13; 303:14;
319:7; 325:5; 327:22;
328:18; 331:12; 332:13;
350:6; 378:24, 25; 379:17;
449:23; 468:24; 494:16;
496:25; 504:8; 524:22, 24,
25; 535:3; 552:21; 587:21,
22, 25; 588:25
else's 582:20
emotional 435:22
emotions 435:22; 436:9
emphysema 526:21;
534:7; 535:2, 11, 23;
537:2; 539:10, 19; 540:2
Empire 301:10; 304:20;
305:13, 17; 306:6; 329:7;
350:19, 25; 351:7, 17, 21;
352:2, 4; 422:9; 455:4;
571:18, 21; 572:5, 16, 22;
573:11, 21; 575:6
Empire's 306:24
empirical 415:3; 446:21;
457:4
empirically 378:12, 16
employed 381:2, 5
employees 288:7;
291:12; 301:4; 322:11;
339:10; 435:13; 436:18;
449:12; 450:16; 567:24
encountered 452:2
encourages 353:11
end 365:17; 400:12;
401:23; 406:13; 463:23;
487:15; 517:13; 518:21;
554:13
endeavor 414:11
endorsed 341:18, 24
endorsement 401:14
engage 384:23; 385:14;
386:3
engaged 399:22
enhance 336:20; 337:3,
6; 338:22; 359:7, 22;
391:24; 395:8; 396:7;
411:23; 415:7; 462:11
enhanced 299:18;
392:16; 464:2
enhances 337:15;
394:11; 436:19; 469:7;
493:21
enough 286:13; 339:2;
347:13, 21; 348:2, 4, 5, 9;
478:22
ensure 335:8; 373:21,
24; 379:7, 14; 391:11
entire 408:14; 410:13;

540:16
entitled 309:23; 438:20
enunciated 354:15
envision 503:13
equal 477:23; 478:2
equality 357:15
equation 486:25
error 286:12; 346:6;
387:11, 16, 21; 388:21;
389:10, 13, 25
errors 286:15, 17;
334:24; 335:3
especially 354:14;
389:21; 440:4; 441:21;
443:18, 19
essence 381:16
essentially 358:6;
400:12; 436:19, 24; 452:4;
464:17, 20; 475:3; 480:14;
481:25; 558:22
establish 531:3; 553:15
established 342:10;
355:2
estimate 518:23; 528:15;
548:19, 22, 23, 24
estimates 516:17, 25;
517:8, 9; 583:5
estimating 349:8
evaluate 286:14; 404:2, 6
evaluated 359:6
evaluating 371:8
even 348:3; 358:23;
360:11; 432:11; 442:4, 9,
24; 444:24; 446:10;
447:14; 448:14; 452:17;
457:22; 464:6; 488:21;
520:18, 24; 533:11; 542:9,
10; 573:6; 575:21
evening 567:7; 569:22
event 400:14, 16, 22;
401:2
events 386:16, 25; 387:4,
7, 10; 388:2; 389:9; 390:3,
14, 24; 391:10; 393:15;
394:3; 395:2, 17; 400:14;
401:3; 475:2, 13
everybody 458:6;
474:11; 481:25
everyone 414:18
evidence 304:24;
319:14; 322:14; 360:22;
385:5, 25; 386:14; 406:16;
415:3; 416:4; 435:2;
439:23; 440:3, 8, 10, 25;
441:6, 12; 442:23; 446:21;
455:17; 469:6; 475:24;
492:7, 16, 18, 20; 523:13,
23; 534:21; 546:21;
567:25
exacerbate 321:13
exactly 288:8; 306:2;
343:10, 12; 428:18;
438:25; 456:9; 459:4;
485:7; 513:11; 517:21;
522:10; 530:25; 550:24;
551:24; 575:22; 582:23;

589:24
EXAMINATION 282:6;
349:25; 411:15; 482:5;
567:5; 570:14
examinations 295:15
examine 300:20
examined 282:4; 293:3;
295:20
example 305:3; 338:6, 8;
344:3, 11; 345:24; 346:19;
353:6; 354:5, 24; 361:12;
362:24; 368:7; 370:21;
371:10; 373:10, 18; 393:9;
398:18; 422:24; 423:6, 16,
17; 452:14; 454:18;
468:20; 493:17; 494:24;
495:23; 501:4; 512:6;
521:3; 524:2, 3; 526:8;
543:19; 544:21; 564:15;
576:19; 579:24; 582:16
examples 292:11;
367:23, 25; 392:20
exclude 348:6, 10; 366:6
excluded 365:8; 443:2
Excuse 284:2; 304:16;
349:21; 409:23; 497:8;
508:9; 517:15; 521:9;
526:8; 530:2; 536:9;
546:18
executive 572:19
executives 322:11;
452:3; 567:14; 568:4
exercise 309:5; 311:2;
531:25
exercises 576:8
Exhibit 383:8; 515:3, 7,
22; 559:6, 8; 562:16;
565:25; 566:5; 567:12;
569:15; 570:9, 11, 15
exhibits 290:19; 393:2, 5;
411:13; 569:8, 12, 16;
574:9, 10
existence 288:25; 289:3,
18
expect 306:3, 9, 11;
307:10; 331:18; 332:9;
343:5; 344:13, 25; 345:11;
349:20, 22; 419:6; 464:4;
522:5; 575:23
expectation 465:23;
466:2, 2; 490:14
expectations 355:12;
409:16, 18; 468:12
expected 307:7; 464:14
expecting 300:22;
349:11; 351:17; 383:18
expense 287:13
experience 349:19;
382:12; 396:6, 8; 419:3;
543:21
experiment 327:20;
435:3, 5, 11; 452:11, 15;
454:15; 468:20; 469:3, 10;
470:10; 473:22; 475:11;
480:7; 574:18, 23; 575:3
Experimental 454:22
experiments 372:2

expert 302:14; 366:14;
385:12; 418:15, 21, 23;
419:4; 421:2, 4, 5, 20;
422:7; 444:14; 446:25;
447:20; 491:10, 14, 17, 21;
25; 495:8, 10; 498:7, 10;
502:8, 17, 21; 503:7;
504:11, 12; 531:19;
537:13, 15; 541:23
expertise 418:12;
418:17, 22; 419:2; 491:8,
13; 492:7; 503:12, 12;
537:12
experts 293:22; 543:15
explicit 298:15;
305:20; 308:22; 351:15;
353:2; 566:12; 567:21;
423:9; 428:21; 430:19, 20;
463:20; 473:9; 509:2;
533:29; 533:4; 561:4
explained 297:19;
555:16
explanation 445:8
explore 300:18; 434:25;
549:16
explored 542:13
expose 435:19; 574:19
exposed 322:3; 326:24;
394:9; 463:7, 10; 473:4,
25; 474:2; 544:23
exposing 301:2
exposure 327:6; 400:20;
436:16; 464:11; 482:12;
483:7; 484:7, 25; 485:2;
487:25; 488:14, 25;
489:15; 553:6; 559:24;
560:18; 561:22;
564:20
express 297:21; 302:19;
321:22; 343:17; 378:5;
419:4; 498:12; 509:22
expressed 300:2;
323:19; 327:5; 311:4;
546:8
expressing 443:21, 21
extensive 335:22; 376:2;
435:17
extensively 335:5;
443:11; 500:19
extent 342:15; 343:6;
348:20, 23; 349:9; 359:6;
370:23; 378:3; 408:9;
413:15; 469:20; 481:8;
526:5, 24; 527:14; 528:7;
534:13; 536:11; 539:24;
575:20, 26
extra 383:10
extremely 398:17;
476:25; 478:25; 479:10;
523:12; 527:4; 534:10;
556:5

F

ace 552:20, 20; 559:13;
561:19
ace-to-face 330:20, 23

facilitate 498:3; 499:17
fact 307:24; 311:3;
313:14, 17; 314:19; 315:4;
316:3, 12; 318:20; 321:12;
324:21, 25; 327:9; 335:4;
343:7, 14; 363:9; 371:18;
372:10; 384:23; 393:23;
399:2; 401:14; 406:6;
408:7; 427:10; 430:13;
434:20, 21; 436:8; 438:10;
440:11; 441:9; 445:6;
449:14; 469:6; 471:6, 12;
472:9; 473:2; 474:19;
478:18; 479:23; 514:6;
522:17; 535:15; 541:17;
565:5; 567:10
factor 499:13; 507:24;
523:2; 528:15; 554:20
factors 398:23; 430:24;
502:17; 536:6, 16
facts 317:12
factual 344:2; 345:24
Fair 339:23; 353:13, 15,
16
Falise 289:14; 290:20
fall 495:21, 22
fallacy 397:15, 22
false 405:10
familiar 358:16; 360:25;
420:9, 18; 422:3; 557:13;
563:17
famous 587:2
far 302:19; 316:14;
320:12; 338:11; 370:12;
427:11, 14, 17; 534:21;
548:16; 549:14
fashion 548:15; 580:8
favor 562:11, 14
fax 289:4; 290:18
feature 370:18; 422:24;
423:6
features 336:19, 20;
338:21
February 282:16, 20;
283:14; 288:14; 289:14,
23; 286:8; 287:25; 289:8;
290:6; 291:11; 292:11,
17; 295:10; 297:7; 298:14;
300:7; 301:17; 308:19;
321:15; 322:19; 323:6;
327:25; 328:15; 329:8;
367:6
Federal 287:11; 289:17;
298:5; 319:6
feel 376:20; 378:4, 10;
456:7, 7, 16, 17; 476:25;
503:22
feeling 326:7
feels 402:7
felt 288:25
few 286:10; 312:18;
359:25; 434:15; 475:10;
483:5; 491:6, 7; 508:16;
553:5; 576:16
fewer 394:16; 437:11, 11;
455:10

field 340:8; 342:11, 17,
18; 349:8; 587:16
fields 341:24
fifth 321:14; 323:18;
555:21
figure 315:2; 317:17;
550:23; 581:17
figures 298:8; 327:17;
429:5; 492:21; 524:15;
543:7; 549:16; 550:2;
579:11; 583:9
filed 295:23, 25; 304:21;
305:18, 20; 306:6
filers 305:13; 308:11;
351:22
files 306:24
filter 366:19
final 518:14; 581:18
finally 290:18, 23; 580:9
financial 445:22
find 286:8; 303:11;
345:19; 349:13, 23;
355:20; 361:15; 382:9;
416:17; 417:2; 428:5;
443:18; 464:4; 466:14;
467:16; 468:9; 469:17;
472:6; 481:24; 483:11;
485:24; 486:4, 9; 487:5;
488:15; 490:6, 11, 15;
500:10; 581:15; 586:6;
589:17, 19; 591:7
finding 298:4; 314:19;
341:8; 482:16; 589:14
findings 443:15
finds 358:6
fine 503:19
firm 369:9
firms 417:6, 7
first 282:15; 284:19;
297:9; 300:12; 313:4;
315:14; 335:16; 338:19;
351:5; 352:3; 365:15;
366:15; 403:3; 404:8;
420:24; 422:13; 438:4;
463:18, 24; 465:15;
466:22; 468:10; 500:19;
510:21; 516:4, 17; 517:22;
518:2; 529:25; 533:19;
553:10; 568:22; 569:25;
570:23; 581:6; 582:13
fit 538:18
five 284:8; 294:19, 24;
296:19; 324:9, 14; 478:19;
514:4; 553:23; 554:4;
555:20; 576:23; 577:24;
578:10
flexibility 410:2
Florida 445:11; 475:2
focus 304:23; 305:10;
360:9; 385:11; 391:13;
399:3; 430:3; 497:25;
502:3; 508:20; 516:2;
523:23; 527:10
focused 497:10; 498:5;
501:15; 524:7
focuses 403:4, 5; 503:14

fold 524:5, 6
follow 355:8; 414:3;
441:3; 583:22
follow-up 344:20
follow-ups 413:24
followed 415:25; 466:20;
547:22
following 342:25;
375:21; 405:2; 414:5;
505:21; 506:13; 532:4;
533:17; 535:13; 591:14
follows 282:5; 411:5
footnote 289:15
force 371:3
forecast 338:12
forever 438:23
forget 504:14
form 302:12; 312:23;
326:15; 329:3; 497:24
format 454:9; 558:17
formats 335:25
formatted 514:24;
551:21; 552:17
formatting 551:24
formed 296:3; 367:3
former 297:23; 298:6, 9,
21; 299:16; 305:14;
308:12, 15; 330:15; 331:5;
339:10; 363:4; 425:18;
430:4, 5, 8, 9, 11; 432:3;
451:23; 458:22; 459:13;
460:5, 10, 17; 461:3;
462:7; 464:9; 484:22;
490:3, 6, 11; 491:2;
509:11, 12, 16; 510:9;
544:9, 17; 545:6, 14; 565:3
forms 302:18; 439:16
forth 531:19
forward 290:3; 464:23
found 286:10; 300:23;
301:11; 304:24; 311:25;
312:2; 358:14; 360:4;
374:13; 416:19; 427:2;
428:10; 454:10; 482:11;
483:6, 16; 485:13, 15, 17;
491:14; 542:5
Foundation 358:11
four 441:18; 461:11, 19,
25; 463:5; 484:8, 25;
487:25; 513:14, 15;
564:20
fourth 465:7, 16; 466:24;
469:9; 505:24
Frank 396:2
frankly 414:22
frequency 350:21
frequently 330:23;
404:22; 424:23
friendly 406:3
front 394:11; 510:14;
562:16; 570:15; 576:21
FTC 290:7
FTC's 287:13
full 301:15; 304:25
fully 309:10; 363:3;

366:23; 367:2; 427:15
funded 358:11
further 331:16; 366:22;
489:9
Furthermore 440:25;
441:5; 466:19; 530:19
future 306:4; 507:7;
398:2, 7, 12, 16, 17; 399:5,
6, 18; 436:4; 459:7, 8

G

gained 283:8
Gallup 417:7; 540:19, 24
game 405:14, 15; 532:12,
13
gaps 477:22
gather 332:4; 335:23;
568:14
gathered 568:15; 581:7
gathering 296:4; 568:12;
580:23
gauge 508:23
gave 352:12; 389:22;
450:3; 467:2; 498:19;
502:16; 503:21
gears 360:8
Gee 347:5
gender 306:5; 564:25
general 295:6; 301:3;
320:3; 351:24; 375:4, 5;
382:8; 390:2; 401:9, 19;
417:6; 436:18, 25; 441:16,
22; 442:7, 10, 25; 443:3, 9;
444:2, 4, 6, 17, 25; 445:13;
446:11; 447:16; 448:2, 16,
17, 19, 20; 449:4, 7, 8, 9,
13, 19; 450:7, 15, 22;
451:2, 19; 452:9, 10, 16,
25; 453:7, 12, 13, 19;
463:9, 11, 21; 464:2;
465:19; 466:10; 467:5, 13,
25; 471:2, 3, 8, 14; 472:5,
19, 23; 473:2, 7; 474:7;
476:3; 481:23; 543:8;
549:12, 13; 559:25; 589:7
General's 431:10; 441:6;
443:24; 464:5; 468:13;
470:2, 16; 474:22; 475:16;
535:14; 559:25
generalizability 315:21;
353:9
generalize 305:10
generally 349:19;
352:14; 400:4; 435:18;
481:22; 538:16; 555:7
generate 313:10; 341:23;
546:23; 548:22
generated 298:7;
328:17; 340:7; 350:2;
368:25; 369:3
generating 367:13
generation 368:11
generic 373:14; 388:13;
564:15

gentleman 293:23
genuinely 445:19
gestures 409:25
gets 301:8, 577:6
given 285:5, 286:3, 22;
287:14, 17, 19; 401:2,
461:22; 465:3; 479:17;
536:15, 540:23; 552:16
gives 305:11
giving 355:9; 460:21;
495:18; 528:3; 575:16;
582:13
goal 337:3, 22, 24; 339:3,
341:4; 356:2, 384:16;
399:18; 416:4; 435:10;
469:10
goals 338:7, 339:4, 14,
17, 17; 367:4
God 423:24
goes 489:22; 579:4
Good 382:8, 9; 317:25;
336:8; 372:13, 15, 19;
338:2; 361:19; 367:11;
370:9; 399:23; 410:10;
415:5; 481:20; 490:22;
525:28; 524:2; 567:7
government 298:5,
319:6
grab 335:11
great 388:23; 399:3;
405:19; 410:16; 473:12;
451:12; 476:23; 478:7, 12;
483:19; 531:21;
553:17, 23; 554:14;
556:10; 576:24; 577:5, 9;
583:15; 579:25; 582:3;
584:10
greater 305:12; 322:20;
343:13
greatest 462:3
ground 559:19
group 300:16; 301:8;
321:3; 405:19; 406:5;
407:2; 461:18, 19; 462:13;
463:6, 9, 10, 11, 12, 12,
13, 21; 464:4; 465:5, 7, 7,
13, 18; 472:19, 19; 466:10,
10, 11; 481:12, 12; 467:5,
5, 13; 14, 20, 21, 25;
468:2; 469:9; 471:8, 9, 13,
14, 19; 479:22, 23; 472:5,
5, 18; 473:7, 8, 8; 475:8, 9;
483:8, 9, 10, 11, 14, 15,
18; 484:7, 15, 17, 18,
19; 485:11, 11, 12, 18, 19,
24; 486:10, 13, 15, 15, 16;
487:18; 503:16; 516:4,
10, 17, 21; 517:6, 8, 9, 12,
14, 22, 25; 518:2, 14, 20,
21; 520:7, 19; 521:6, 7, 17,
18; 522:6, 8, 523:3, 10;
530:13; 552:15; 560:2
groups 308:17; 321:2;
440:23; 552:7; 370:21;
372:13; 453:11; 461:17;
17, 24; 463:6; 464:17, 19;
465:4, 6, 9, 11, 16; 467:17,
22; 468:11; 469:5; 472:2,

9, 474:16, 18; 482:12;
483:7, 484:9, 11, 25;
485:2; 487:25; 488:14, 25;
500:22; 516:3; 520:14;
523:7, 22; 553:6, 559:24;
560:18, 23; 561:22;
564:20
growing 315:17
guess 312:25; 318:9;
348:3; 359:3; 370:8;
376:10; 389:16, 412:21;
419:17; 431:20, 459:10;
461:14; 469:15; 479:13;
495:20; 498:24; 499:19;
586:3; 588:2, 7, 9
guidelines 332:24; 334:3
Guy 496:16, 20, 21

H
habit 460:6
half 321:10; 440:22;
455:13, 16
hand 363:11; 423:20;
524:8; 570:12
handful 306:14; 570:21
Hanson 285:19, 24;
286:29; 352:23, 24
happen 391:12; 475:13;
589:9
happened 371:17;
372:24; 452:4; 474:20;
475:10, 14; 476:4
happening 400:15, 16
happens 308:5; 359:5;
407:22; 406:9, 10; 475:12
happy 473:11; 478:25;
583:13; 587:18; 588:13
hard 552:32; 444:10;
550:10
Harman 284:14; 309:2
harmful 327:18; 541:5,
19, 21, 25; 542:10, 17;
543:4
Harris 529:20
Harvard 420:25; 500:6
head 494:22
headed 515:23; 559:9
health 293:4, 6; 299:5;
322:5, 15, 16, 25; 327:10;
328:10, 13; 330:16, 20;
331:4, 16; 339:9, 22;
341:6; 383:19; 384:6;
385:21; 403:2, 6, 8, 11, 16,
19; 415:14, 24; 417:17;
420:25; 421:23; 430:2;
432:16, 24; 434:22;
436:17; 437:2; 440:20;
441:2, 3, 8, 10, 24; 442:5;
443:2; 444:7, 18; 449:15;
18; 450:9, 10, 20, 21;
451:2, 11, 18; 452:8, 9, 12;
453:24; 455:12; 469:13;
474:23, 25; 475:5, 24, 25;
495:19; 497:13; 498:18;
499:4, 5, 501:5; 504:6, 20;

505:4, 13, 25; 507:3, 10,
15; 526:18; 527:8, 12, 19;
528:14, 18; 529:12, 14;
531:12, 16; 532:22;
533:12, 16, 22; 543:13;
568:2
hear 287:22; 293:7;
347:17; 365:11; 388:22;
391:4; 437:17; 439:19;
442:3; 450:14; 472:18;
474:6; 543:11
heard 324:21; 325:7;
369:10; 397:14, 18, 20, 22,
22; 421:9; 422:12, 13;
436:22; 452:5; 453:10, 12,
14, 18; 465:8, 13; 469:25;
470:4, 16, 25; 471:2;
480:25; 563:19, 21; 564:3;
565:6, 7, 7
hearing 339:8; 443:14;
452:2; 463:25; 472:20;
473:15, 18
hears 474:11
Heart 453:22; 526:21;
534:6; 535:2, 7, 23;
536:21; 539:12, 21, 25
heck 337:21
Heffer 284:9; 291:4, 20;
292:18, 22; 302:3; 303:7;
304:5; 307:2, 17; 308:6;
309:17; 312:14, 23;
313:19; 315:13; 317:16;
22, 318:7, 23; 320:8, 24;
323:12, 25; 325:13;
326:15; 332:3, 7, 21;
333:25; 334:7; 336:14;
338:3; 342:13; 343:19;
347:16, 25; 348:8; 349:6;
350:8; 352:20; 354:8, 17;
356:8, 19; 359:13, 18;
361:21; 362:22; 365:11,
14; 369:18, 21, 24; 370:5;
373:23; 375:7, 19; 376:25;
378:22; 379:10, 16;
382:22; 383:3, 10, 14;
384:13; 385:16; 386:18;
387:12, 17, 22; 389:4, 11,
15; 390:6, 16, 25; 391:7,
19; 393:16; 394:5; 395:4;
396:16; 397:6; 398:3;
401:21; 402:21; 404:5, 14;
406:15; 407:18, 22;
409:13; 410:16; 411:6, 19;
412:17; 419:13; 420:6;
421:22; 424:5; 426:17;
432:5, 9; 433:2, 12, 25;
434:7; 437:17, 22; 438:24;
439:10, 19, 22; 444:19;
445:2; 447:3, 8, 17; 449:8;
451:12; 454:3; 455:13, 25;
460:8; 466:8; 470:6, 18,
23; 471:4, 10; 472:14;
476:7; 478:15; 479:5;
484:13; 485:21; 486:2, 6,
19; 488:5; 489:18; 490:8;
492:3; 496:5; 500:11;
503:10; 504:25; 505:7, 16;
506:4; 508:3; 510:5, 11,
16; 512:24; 513:10; 515:5,
11, 15; 519:7, 14, 22,

521:19; 526:4; 528:2, 10,
19, 22; 529:5, 15, 21;
532:24; 533:13, 24; 534:3,
16; 536:4, 17; 537:20, 24,
538:7, 12, 15, 19, 24;
540:3, 15, 25; 542:3, 18;
547:16; 549:4; 550:9;
558:13, 18; 559:17; 560:3,
19, 25; 561:24; 562:17;
563:3, 11, 15; 565:8, 12;
566:9, 15; 568:7; 570:13;
571:24; 572:11; 573:7, 15;
574:6; 575:17; 578:11;
579:13; 580:5; 583:16;
586:2; 588:10; 592:3
help 294:11; 393:13;
395:14; 399:15; 515:9;
589:12
helped 393:5
helpful 286:22; 368:15;
389:17; 395:6; 401:16;
525:5, 11, 12; 568:21;
586:22
helps 392:23; 394:3
here's 509:19; 588:2
herself 353:19; 381:19;
402:6
hesitate 397:10
hesitating 397:12; 400:3;
548:6
high 297:17; 298:4;
315:23; 341:17; 346:23;
349:22, 23; 360:3, 12;
390:12, 19; 417:5; 511:19;
523:11, 12, 14, 25; 524:9,
17; 527:4; 534:11
higher 316:16; 319:22;
344:23; 358:12; 360:5;
521:23; 522:2; 523:5;
524:22
highest 464:22
highly 465:9
himself 381:19; 402:5
historian 293:25
historically 474:21
history 292:9
hold 322:8; 382:9; 419:5;
438:23; 447:6; 512:7;
527:3; 530:8; 534:10;
537:22
holding 468:24; 512:12,
13, 18; 524:22, 24
hope 314:15; 490:20
hopes 353:17, 19;
355:12; 409:16, 18
hotel 515:9
hour 356:20
hours 283:12, 18; 284:5,
8; 294:16, 20, 23, 23, 24,
295:4
household 363:14
households 361:15;
363:12
huge 495:8
hundred 416:11
hundreds 481:12

hung 310:18; 312:18;
370:2
hurt 338:19
hurts 443:22
hypothesis 435:4;
469:16
hypothetical 396:14;
469:11; 470:24; 521:15

I

idea 304:25; 342:25;
440:5; 454:24; 464:10;
480:2; 481:13; 493:12,
529:12; 548:19
ideally 361:24
identical 452:7; 469:5;
472:10; 514:6, 8
identically 413:8
identification 371:11,
14; 515:25; 559:6, 10;
565:25; 566:8
identified 298:5; 361:11;
498:13
identify 293:10; 298:21;
331:19; 358:16; 359:12;
371:20; 416:23; 440:13;
589:12
identifying 301:9
ignores 561:10
illness 422:23; 423:6, 15,
23
illustrate 343:8; 513:19
illustrations 522:17
image 504:4
imagine 364:25; 444:10;
524:12
impact 301:2; 321:4;
339:8, 21; 341:5; 358:5;
398:25; 409:15; 435:13,
14; 438:8; 447:10; 449:3;
451:22; 453:2; 474:12;
480:9; 488:20; 494:5, 13;
497:25; 501:6; 507:24;
524:10; 561:14; 562:5;
572:22; 573:12; 574:13,
21
impacted 470:13
impacts 522:15
impartial 444:4
implement 338:18;
379:2, 6, 13
implemented 317:8;
341:16; 372:15; 377:6;
417:13; 436:10; 474:10
implementing 378:15
implements 355:4; 368:5
implicate 456:24; 457:14
implicated 520:16
implication 349:13;
428:23
implications 395:10
implicit 405:12; 436:5
implicitly 405:16

implied 385:19	454:14; 458:22; 459:2, 13; 14, 14; 460:13; 462:22; 463:16; 464:3; 466:23; 488:12; 490:20; 553:7; 558:4; 560:17, 24; 576:18; 579:6; 584:17; 587:4	543:18; 574:22	intentions 398:2, 8, 12, 16, 22, 24; 399:3; 435:20, 21; 436:9	411:22
important 320:6; 354:14, 18; 372:20, 22, 24; 403:17, 20; 451:5, 8; 474:15	indicate 297:17; 315:3; 316:11; 319:15; 362:13	inferring 343:12; 348:25	interchangeably 511:10; 514:12	introduced 346:6
importantly 435:21	indicated 366:21; 374:16; 483:11; 491:9; 502:7; 525:13; 540:22; 586:23	influence 403:24; 443:13; 493:15; 576:8	interest 297:25; 300:12; 336:4; 351:19; 355:23; 394:8; 414:17; 415:9; 430:4; 435:9; 436:11; 451:21; 474:4; 566:11	Introduction 591:3, 5
impossibility 572:7	indications 316:13; 321:11; 327:15; 441:13	influenced 326:25, 372:9, 10; 450:3; 459:22	interested 288:17; 317:20, 24; 318:3; 345:14; 362:3; 371:10; 372:7; 495:7; 543:10; 546:24	introductory 591:10
impossible 435:7; 548:18	indicating 289:15; 311:7; 322:4, 14; 348:11; 441:6; 444:2	influences 403:25; 419:21	interesting 459:20	intuition 378:19
improper 332:25; 334:4	indication 348:2; 461:22	influencing 492:22; 524:21	international 529:19	intuitions 376:6
improve 567:23	indications 460:24	influential 327:16	Internet 569:18	invested 581:3
improvement 413:24; 414:7	indirectly 460:24	information 283:8; 287:14, 17; 288:19; 290:12; 291:15, 15, 17; 297:21, 22; 309:19; 310:25; 311:20; 314:2; 317:18, 21, 24; 326:24; 327:6, 13; 329:21, 24; 331:18, 21; 332:4, 9, 11; 336:4; 353:7; 394:14; 400:21; 401:6; 402:11, 13; 424:21, 24; 425:3, 6, 7, 14; 450:2, 4; 473:16, 19; 523:19; 527:23; 532:7; 533:6; 534:23; 535:16; 537:17, 18, 25; 553:11; 560:14; 562:3, 7	interpret 317:12; 386:9; 411:20; 412:19; 458:11; 479:10; 503:12; 532:5	investigate 346:8
inaccuracy 375:9, 10; 425:13	individual 353:18; 345:8; 402:5; 425:7; 484:25; 488:24; 559:7	informative 468:8	interpretation 385:9; 503:18; 532:4, 14, 16	investigated 376:3
inaccurate 390:5, 15	individual's 511:13	informed 311:11; 477:18, 19; 527:24; 528:6; 531:17, 24; 532:2, 6, 16; 537:18; 538:2, 4	interpretations 458:10; 478:21	investigation 349:16
inappropriate 558:25	individuals 291:23, 25; 300:14, 16; 361:9; 364:11, 13, 14; 365:6; 366:6; 309:3; 311:10; 320:14; 321:3; 351:20; 352:4; 356:12; 367:9; 362:23; 363:2; 369:9; 371:17; 380:23; 384:7; 400:24; 406:11, 11, 25; 423:2; 459:10; 460:7; 511:16, 25; 512:21; 530:8, 19; 543:17	ingredient 513:17; 524:14	irrelevant 316:8, 9; 317:5; 471:9, 11; 539:3; 540:17	investigations 360:21
inch 566:17	industries 567:8; 575:19, 23, 25; 576:4, 8	ingredients 513:2, 4, 13; 522:16; 526:7	irrational 424:11	investigator 353:17
incidence 344:23	industries-related 575:14	inhibit 419:22	irrelevant 316:8, 9; 317:5; 471:9, 11; 539:3; 540:17	involve 335:17; 367:12; 404:23; 405:9; 451:17
incidences 543:20	industry 288:7, 18; 290:16; 291:12; 292:3; 301:3; 321:12; 322:23; 324:19; 325:12; 437:7, 15; 438:5; 439:10; 440:12; 442:4, 8, 24; 443:7; 444:9, 11, 24; 445:6, 10; 446:8, 15; 447:24; 448:14; 449:3, 6, 12; 450:16; 451:10; 455:16, 22; 459:23; 470:4, 12; 475:6, 23; 542:16, 21; 543:14	informative 468:8	isolated 300:13; 301:5	involved 298:4; 341:15; 369:14; 373:7; 385:23; 398:20, 21; 413:2; 414:10; 423:22; 583:4
incidents 391:10	ineligible 361:12, 18; 362:24; 363:7; 364:21, 21, 23, 25	informative 468:8	isolation 446:5; 452:2	involves 389:12; 396:9; 400:9; 487:15
inclined 405:23; 552:12	ineligibles 361:2, 20; 362:6, 9, 13, 21; 363:16; 364:18; 365:7, 16, 21; 369:17, 20	informed 311:11; 477:18, 19; 527:24; 528:6; 531:17, 24; 532:2, 6, 16; 537:18; 538:2, 4	issue 298:2; 353:23; 355:16, 23; 357:24; 424:18; 457:17; 505:18; 542:13; 568:22; 582:21; 586:24, 25	irrational 424:11
include 294:19; 308:12; 310:7; 312:22; 346:18; 362:20; 413:17; 422:2; 430:5; 475:22; 495:23; 498:17	infer 542:19	ingredient 513:17; 524:14	issues 331:16; 398:8; 415:14, 24; 444:7; 498:5	irrelevant 316:8, 9; 317:5; 471:9, 11; 539:3; 540:17
included 283:4; 311:17; 312:22; 346:18; 363:14; 364:18, 22; 365:13, 22; 429:21; 449:23; 452:22; 459:13, 16; 476:2; 567:11	inference 338:19, 20; 436:21; 557:7; 571:8	ingredient 513:17; 524:14	item 287:10; 376:12, 21; 377:19; 378:15; 457:5; 527:10	isolated 300:13; 301:5
includes 322:9; 476:18; 494:21; 504:5	inferences 336:22; 337:5, 9, 16, 17, 18, 18, 19, 23, 25; 338:14, 16, 23, 25; 347:15, 21, 23; 372:18; 396:20; 399:13; 411:24;	ingredients 513:2, 4, 13; 522:16; 526:7	intervals 554:24; 555:24	isolation 446:5; 452:2
including 284:19; 310:13; 311:18; 363:4; 449:15; 540:6	infer 542:19	inhibit 419:22	intervention 419:22; 420:4, 9, 10; 498:2; 499:6, 8, 12, 16, 21, 25; 500:21; 501:2; 504:5	issue 298:2; 353:23; 355:16, 23; 357:24; 424:18; 457:17; 505:18; 542:13; 568:22; 582:21; 586:24, 25
inconsistency 347:13, 22; 416:21	inference 338:19, 20; 436:21; 557:7; 571:8	initial 350:17	interview 293:4; 299:6; 328:10; 330:16, 20; 331:4; 343:4, 8; 344:7; 406:13; 408:18; 413:3; 435:7, 16; 537:9; 542:5	issues 331:16; 398:8; 415:14, 24; 444:7; 498:5
inconsistent 347:7; 348:6; 382:10; 384:4	inference 338:19, 20; 436:21; 557:7; 571:8	initiate 461:4	interviewed 321:4, 6; 343:9; 355:6; 356:12, 13, 14, 16, 17; 363:3; 365:5, 5; 369:15; 413:5	item 287:10; 376:12, 21; 377:19; 378:15; 457:5; 527:10
incorporate 383:15	inference 338:19, 20; 436:21; 557:7; 571:8	initiated 384:3	interviewer 409:5, 8, 11, 14, 17, 21; 410:5, 9; 413:2, 6; 414:10	isolated 300:13; 301:5
incorrect 386:18	inference 338:19, 20; 436:21; 557:7; 571:8	initiating 524:24	interviewers 413:4; 457:24	isolation 446:5; 452:2
increase 388:10; 422:22; 425:19; 430:12; 434:21; 508:24; 509:8, 17; 516:21; 521:11; 543:24; 544:10, 15; 546:9; 558:24	inference 338:19, 20; 436:21; 557:7; 571:8	initiation 438:17; 494:6	interviewing 341:20; 342:19; 361:8	issue 298:2; 353:23; 355:16, 23; 357:24; 424:18; 457:17; 505:18; 542:13; 568:22; 582:21; 586:24, 25
increased 407:9, 13, 13; 509:23; 510:18, 9; 512:3, 23; 514:1; 516:18; 517:4, 22; 518:13; 524:7; 526:25; 527:15; 528:4; 534:15; 535:6, 10; 536:12, 20, 22; 539:4; 540:2	inference 338:19, 20; 436:21; 557:7; 571:8	innovative 341:14	interviews 299:7; 343:4; 344:6; 358:4; 361:9; 528:17, 20	issues 331:16; 398:8; 415:14, 24; 444:7; 498:5
increases 344:21; 345:2; 388:16; 394:17; 406:24; 424:5, 6; 526:19; 529:24; 530:6, 15; 534:5	inference 338:19, 20; 436:21; 557:7; 571:8	inoculators 459:25	into 315:11; 350:22; 363:2; 372:2; 408:14; 410:13; 416:13; 448:22; 24, 25; 449:14, 18; 452:15; 490:25; 583:9	item 287:10; 376:12, 21; 377:19; 378:15; 457:5; 527:10
incurred 430:3; 571:18; 572:5, 17	inference 338:19, 20; 436:21; 557:7; 571:8	inserted 452:15; 572:8	introduce 336:6; 354:3;	isolated 300:13; 301:5
indeed 464:7; 480:19	inference 338:19, 20; 436:21; 557:7; 571:8	insofar 357:12; 396:9		isolation 446:5; 452:2
index 327:19, 21; 328:20, 22, 25; 345:7; 373:19, 21; 374:4, 7, 8, 10, 12; 434:15; 436:13; 437:6; 438:16;	inference 338:19, 20; 436:21; 557:7; 571:8	inspire 382:13		issue 298:2; 353:23; 355:16, 23; 357:24; 424:18; 457:17; 505:18; 542:13; 568:22; 582:21; 586:24, 25

jury 533:5,9
justifies 478:3
justify 461:13

K

K 282:2, 2, 411:4, 4
K-a-n-d-e-l 496:15
K-e-e-t-e-r 358:10
Kandel 496:12, 15
keep 354:20; 465:17;
509:7; 576:2
keeping 408:16
Keefer 358:9
key 295:20; 301:11;
390:3; 351:19; 357:22;
398:7; 367:11; 377:4, 5,
404:14
keyword 568:18
kinds 483:23
kind 302:24; 337:13, 14;
339:24; 357:12; 367:21;
446:12; 425:7; 450:24;
454:11; 459:12; 469:23;
475:9; 552:16
kinds 320:20; 357:15;
396:21; 399:12; 440:18
K-in 385:7; 289:13; 546:22
knew 488:20
knowing 348:3; 353:18;
512:21; 546:20
knowledge 340:23;
350:6, 13; 375:10; 382:2;
382:24; 433:9; 481:17;
492:6; 497:13; 504:20;
505:13, 25; 507:3;
549:5; 573:18; 574:24, 25;
575:8
known 330:22; 335:21;
385:21
known 529:6
Krosnick 282:8; 303:24;
325:18; 356:25; 357:5;
411:17; 442:16, 20; 482:7;
483:5; 515:22, 24; 516:3;
520:18; 529:6; 531:10;
533:18; 537:16, 21;
539:23; 543:4; 544:16;
545:8, 25; 546:5, 7;
549:12; 563:9; 566:5;
575:6; 577:12; 569:15;
590:11; 590:4, 11, 14;
592:11

L

label 490:19, 21, 23, 24
labeled 366:17
laboratory 574:17, 19
lack 417:12; 533:11
language 321:19; 565:14
large 299:8; 314:21;
322:3; 346:8; 381:12;
416:10, 16; 445:12;
477:16, 24; 478:17;

496:11; 497:3, 25; 500:5;
501:3; 556:12; 568:19;
578:20; 588:3
largely 506:19
larger 321:7; 468:22, 25
last 282:15; 283:2; 285:8;
293:11; 296:25; 297:9;
299:20; 303:4; 308:25;
328:5; 358:8; 362:12;
369:7; 383:7; 388:8;
401:23; 416:11; 424:6;
430:25; 445:5; 446:16;
448:7; 518:20; 520:19;
533:2; 567:25; 575:10;
588:6; 589:17, 21
late 308:25; 567:10;
569:22
later 438:9; 343:13; 344:7
latest 515:18; 591:4
latter 381:23, 25; 434:9
lawsuit 429:25; 445:12
lawsuits 445:23; 446:17
lawyers 506:16; 393:2
lead 375:3; 408:2;
449:2; 481:3
leading 466:25; 404:4;
10, 12; 457:12; 458:19;
580:18; 582:2
leads 361:9; 381:22
learn 472:21
learned 453:21
learning 288:17; 568:16,
21
least 291:9; 318:14;
357:23; 384:18; 407:3;
462:3, 5; 520:6; 551:2, 3,
14, 16; 588:5
less 582:8, 11
led 363:13; 366:20;
444:23; 442:2; 477:25
left 290:21
legal 324:11, 12, 15;
325:24; 326:4, 8; 392:2;
402:9; 414:9; 425:9
legitimate 299:14
length 490:18
lengthy 369:8
less 314:25; 315:5; 319:9;
321:4; 330:23; 415:5;
427:11; 433:21; 434:23;
437:4, 8, 9, 10; 438:7, 10;
439:17; 440:2, 6; 441:4;
442:2; 445:3; 447:19;
455:22; 462:15; 487:8, 9;
521:24; 531:8; 558:23;
573:8
level 486:18, 20; 539:15
levels 390:12, 19;
489:15, 21; 522:18, 19;
523:8; 524:9, 20, 21;
538:10
liability 445:22
library 568:17; 581:15
lied 346:14
life 423:19; 547:23

lifetime 427:24; 429:8, 18
lifetimes 428:7
light 461:21; 477:16
likelihood 336:2, 20;
338:18, 22; 345:2; 354:4,
25; 355:5, 8; 370:25;
372:7; 388:10, 11, 17, 19;
392:16; 394:18; 408:3, 6;
410:10; 415:8; 422:23;
428:2; 436:3; 460:4;
462:4, 5; 493:22, 24;
522:22, 22; 523:14;
524:23; 543:19; 550:15;
558:24; 579:7
likely 326:24; 327:5;
336:13; 337:12; 345:13,
15; 351:24; 371:21;
372:14; 377:19; 399:11;
440:2; 441:4; 443:19;
461:2; 480:13; 490:7;
511:18; 517:7, 7; 521:16,
24; 522:7; 523:22; 570:20;
571:15; 583:21; 584:4;
589:19
limited 449:5
line 540:16; 590:5
lines 353:25
Lisrel 486:24
list 334:10; 335:16; 336:8;
399:23; 414:3; 492:13;
494:3; 497:11, 21, 22;
498:4, 15, 16, 21, 23, 25;
499:3; 501:10, 12, 502:16,
24; 503:21; 504:5; 587:17,
18
listed 306:21; 324:9;
440:16
Listening 504:18
listing 288:5, 16; 291:11;
309:2; 323:9; 369:10
literally 345:9; 490:17
literature 316:4, 13;
321:11; 334:23; 335:2;
339:25; 354:16; 355:17;
19, 22; 357:18, 19; 358:17;
359:11; 374:20; 381:9, 13,
14; 401:8; 404:17; 406:22;
407:7; 420:15; 440:3, 10;
441:13, 18; 443:10, 15;
454:11; 477:3, 16, 24;
478:18; 481:10; 492:6;
493:10; 494:5, 7; 495:9;
496:2, 7, 11; 497:3, 23;
498:6, 9, 13; 500:12;
501:3; 502:13; 503:7;
506:14; 578:20; 580:11,
22, 23; 581:7; 589:15
litigation 354:6, 13;
448:8
little 290:24; 298:15;
355:14; 357:17; 359:3;
400:3; 454:6; 470:7;
476:24; 478:8; 491:19;
522:9; 550:10; 553:18;
562:14; 577:18; 578:5, 18;
580:3; 584:5, 11; 586:3
live 300:14; 301:6
lives 548:3

living 300:16; 304:11, 13,
14
logarithmic 557:9
logic 461:25
logical 343:5, 11
logically 344:9; 382:10
long 291:9; 335:16;
390:3, 7, 10; 406:13;
437:20; 443:11; 463:19;
468:22; 487:4; 515:10;
538:7
long-term 504:20; 505:4,
13, 25; 507:3, 9
look 290:3; 299:12;
301:14; 302:16; 307:19,
20; 344:15; 345:16; 358:4;
411:13; 416:14; 418:4;
463:25; 484:8, 21, 24, 24;
487:12; 518:22; 520:2;
524:25; 525:8, 13, 15;
534:2; 543:17; 560:4;
563:24; 566:22; 568:3;
570:14; 582:17; 588:12
looked 293:20; 299:17;
304:23; 345:5; 394:13;
416:20; 485:5; 487:23;
489:17; 525:22; 528:16;
568:8; 569:16; 570:2;
574:3, 7, 9
looking 346:10; 351:25;
376:12; 388:14; 416:15;
418:8; 451:22; 457:6, 19;
459:24; 486:23; 487:18;
489:10, 20, 24; 534:23;
535:14; 537:5; 560:12, 14,
21; 561:21; 567:22;
582:14; 586:14
looks 503:15
losing 445:12
lost 292:23
lot 319:24; 409:24;
416:21; 424:25; 429:15;
432:19; 490:22; 562:13;
580:11; 581:3; 584:5
lots 334:15; 497:2;
522:25; 535:16
louder 474:22
low 315:10, 15; 316:13,
20, 23; 320:5, 9; 358:5;
360:2; 511:17
lower 315:24; 316:2, 10,
11; 320:10; 358:13; 359:7,
16; 360:4; 365:23; 366:9;
524:23; 550:15
lump 461:11, 16
lumped 552:2
lunch 328:6; 410:15;
424:19; 463:17
Luncheon 410:19
lunchtime 307:18;
309:18; 310:2
lung 329:21; 339:7;
344:18, 22, 23; 345:2;
377:15, 22; 423:16, 18;
425:20; 426:8, 10; 427:3,
10, 21; 428:2, 7, 12; 429:9,
17; 430:13, 15; 432:4, 8;

436:25; 446:9; 453:23;
508:24; 509:9; 514:19;
516:7; 518:2, 3, 4, 24, 25,
519:6, 10, 13, 21; 520:8,
15, 20, 25; 521:10; 524:13;
526:21; 530:2, 3, 7, 22;
534:6, 22; 535:24; 536:15;
539:25; 544:11, 18; 545:7,
15; 546:10, 14; 548:2, 20;
549:10, 12, 18; 550:6, 18

M

M-a-r-a-y-a-n 590:15
m-e-t-a 416:7
mainly 406:3, 4
major 403:13; 475:7
majority 338:9; 425:18;
509:7, 15; 531:11; 544:9,
16; 545:5, 13; 546:8, 13
makes 298:12; 299:10;
341:9; 354:3; 424:9;
443:16; 458:13, 15; 461:5;
466:9; 563:25
making 337:23, 24;
338:19, 22; 399:13;
426:19; 437:3; 449:13;
475:4; 481:13; 493:19;
543:14; 562:22; 587:14
man 307:12
manipulation 301:2;
372:10, 15; 373:16;
462:20; 464:18; 466:19;
562:5
manipulations 480:10;
488:20; 561:15; 581:21;
584:20
manner 410:14
many 283:12, 25; 284:5;
295:4; 305:10; 327:11;
335:23; 353:4; 360:6, 11;
373:4; 396:20; 405:24;
413:10; 416:12, 20;
420:14; 424:11; 430:23;
431:9, 16; 432:14; 453:6,
13; 464:8, 10; 475:15;
498:4; 507:6; 514:19;
524:5, 6; 551:24; 552:10;
556:4; 589:25; 590:2
Marayan 590:14
March 566:7; 592:6
mark 411:12; 559:6;
565:24; 566:12
marked 383:7; 515:24;
559:10; 566:7; 567:12;
570:8
mass 494:6, 13
match 366:5; 476:3;
540:9
matching 331:3; 345:9
material 301:16; 307:18;
310:23, 24; 558:6; 575:14
materials 282:23, 25;
283:3; 284:19, 20, 21, 23;
285:16; 286:3, 21, 24, 25;
287:3, 3, 5, 7, 23; 290:5, 7;
291:25; 293:10, 12;

294.16, 24; 295.8, 10, 21;
296.5; 297.6; 305.23;
307.13, 24; 308.24;
309.23; 321.16; 323.4, 20;
330.5; 340.7; 463.19;
465.2; 467.2; 566.2
matter 345.25; 386.13;
422.17; 427.14; 445.20;
582.8; 586.14
matters 344.3; 360.24;
415.9; 543.6
maximally 520.5; 530.14
maximize 336.2
maximum 460.17; 530.8;
556.18
may 309.22; 320.5;
332.9; 336.24; 340.22;
367.14; 371.4; 384.3;
385.21; 397.9; 397.18;
402.25; 420.20; 431.4, 19;
438.22; 445.23; 446.3;
450.3; 458.14; 478.12, 16;
479.2; 486.23; 487.8;
488.4; 489.23; 495.5;
499.10; 510.18; 519.18;
18; 532.17; 540.20; 542.10;
11; 543.16, 21; 549.5;
570.3; 575.12, 12
maybe 286.10; 359.9, 25;
458.16; 499.19; 531.2;
583.12
mean 290.23; 291.2, 3;
306.8; 307.6; 311.4;
312.6; 319.18; 325.15;
19; 328.13; 330.2, 11;
331.22; 333.4, 7; 334.21,
23; 348.13; 351.7; 361.5;
383.24; 388.7; 390.7;
397.21; 401.10; 418.4, 19,
21; 419.16; 421.25;
428.18; 432.18; 438.11, 21;
445.25; 456.22; 463.23;
466.22; 477.8; 478.8;
12, 13, 16; 482.16, 24;
480.16; 481.6; 10, 14, 16;
19; 491.19; 500.7; 507.5;
509.24; 518.13; 516.10, 13,
14; 558.3; 564.14; 580.14;
581.18; 583.8; 585.3;
586.4
meaning 325.24; 326.3,
4, 18; 386.7, 9; 400.8;
408.11; 411.21; 458.6;
532.5
meaningful 462.10;
532.17; 565.14, 15
meanings 400.3; 458.12;
477.17, 25; 478.21; 556.6,
13; 578.21; 583.5
means 291.5; 300.19;
326.6; 380.9; 428.20;
434.9; 478.10; 488.21;
533.25; 556.8, 10; 557.8,
23; 558.8
neant 346.18; 366.18;
585.20; 412.9; 443.3;
503.5
neasure 298.25; 299.15;
520.17; 333.9, 11, 18;

338.9; 339.5, 8, 18, 21;
341.4, 5; 373.2; 380.20;
384.17, 18, 18, 412.22;
435.7, 23; 436.2, 11;
459.6, 8, 478.23; 481.6;
507.24; 508.7, 11, 14;
514.4; 559.9; 579.18, 20
measured 298.6; 414.18;
459.5; 526.5
measurement 387.11;
16, 21; 388.17, 20; 389.10,
12, 13, 24, 25; 391.14, 14;
398.21; 426.12; 462.12,
15, 18; 513.25; 514.2, 3, 9,
13; 549.2
measurements 299.4;
375.9, 12; 398.16, 20;
399.9; 415.4, 5
measures 340.9, 12;
372.8; 461.20; 462.2;
578.9
measuring 348.21;
360.10; 436.8; 408.18
media 286.7; 291.13;
296.9; 322.13; 331.15;
475.4; 494.13; 498.12
median 479.16; 24;
480.3; 4, 6, 34; 19, 20, 25;
481.2, 7; 558.10, 17, 23;
559.22; 560.18; 561.5,
21
medians 338.19; 339.9;
560.8, 12; 562.3, 8
mediated 409.18
meet 361.10; 431.1;
552.21
meeting 284.7
meetings 283.21
memoranda 320.2
mention 482.25; 451.17;
464.25; 499.14
mentioned 285.15;
293.19; 305.4; 322.20;
330.12; 346.23; 352.23;
359.5, 23; 385.10; 494.11;
497.4; 551.22; 552.18;
568.22; 586.8
merely 389.18
message 438.9; 443.13,
14
messages 435.12;
436.23; 468.13; 474.24;
476.2; 542.24; 543.12;
565.6
messenger 474.15
met 283.25; 294.20;
530.10; 552.19, 23
meta 416.7
meta-analysis 416.8, 9
method 546.23; 547.18;
548.6
methodologies 416.18;
418.9
methodology 330.19;
381.13; 454.7, 10; 486.23;
591.8
methods 298.25; 299.3;

375.17; 379.12; 381.2, 5;
416.23; 481.23; 581.4;
584.22; 585.2; 586.17;
591.11
meticulous 336.5
Michigan 358.3
middle 291.10; 307.22;
407.2; 516.5
midwest 300.15; 304.12
might 286.15; 288.20;
292.8, 12, 14; 298.23;
314.24; 317.11; 325.22;
334.18; 338.6, 11, 15;
345.4; 346.9; 363.6;
368.5; 371.10; 386.10, 12;
405.4; 423.16; 444.6;
466.20; 494.22, 24, 25;
495.2, 22, 23; 503.14;
515.9; 552.12; 563.22
Miller 590.4
million 402.17; 431.6, 24;
432.2, 23
mind 373.20; 381.22;
400.13; 408.16; 418.25;
424.9; 476.6; 488.2;
509.20; 511.2
Mine 455.2
minimize 354.3, 23, 25;
355.5, 8; 356.2; 445.22
minimized 336.2
minimum 354.21
Minnesota 500.23
minus 283.20
minuscule 433.21
minute 492.23; 518.22
minutes 284.7; 312.18;
356.20
mirror 504.4
Mischaracterizes 456.2
misleading 481.3
misreport 375.2
misrepresent 381.19
missing 456.12
misstate 346.17
misstated 346.16
mistake 346.4; 348.12
mistakes 334.24; 335.3;
336.7
misunderstood 496.18;
499.19; 565.16
mixed 359.4
mnemonic 459.12
mode 414.22, 23
model 422.4; 436.5;
493.21
modeling 486.25; 493.17
moment 283.11; 293.15;
294.14; 316.3; 317.4;
327.5; 365.20; 380.25;
389.22; 392.21; 393.21;
400.9, 22; 401.2; 402.24;
407.8; 412.2, 19; 417.19;
418.14; 463.14; 482.22;
495.5; 503.13; 549.17;
560.4

moments 401.4; 434.15;
491.6
months 475.10; 487.2
more 283.17; 288.8, 17;
290.24; 292.8, 15; 293.8;
296.9; 298.15; 299.2, 3, 7;
303.11; 305.8, 9; 316.15;
319.21, 23; 321.8, 10, 20;
322.9, 25; 324.13; 326.7;
336.9; 343.3; 345.12, 13,
14, 15; 347.17; 350.4;
352.14; 354.10; 360.4;
361.25; 364.4; 371.20, 21;
375.4; 381.14; 388.22;
391.4; 398.10; 399.8, 11;
406.9, 10, 13, 18; 416.24;
436.5, 6, 7, 7; 441.15, 21,
23; 442.4, 9, 24; 443.7;
444.24; 446.10; 447.14;
15; 448.14; 449.3; 452.17;
455.19; 468.9, 25; 472.16;
473.3; 490.7, 12; 495.2, 3;
500.5; 505.2; 511.18;
517.7, 25; 518.4; 521.16;
522.7; 523.22; 546.25;
548.10; 549.6; 550.3;
553.5; 562.13; 566.13;
567.3; 572.13; 576.16;
583.21; 584.4; 590.8
morning 282.8, 9; 284.4,
6, 7; 295.2; 302.6; 303.2;
323.19; 352.16; 355.15;
357.18; 367.7, 8; 372.19;
409.3; 411.10
most 326.24; 337.12;
349.18; 362.3; 404.22;
414.24; 432.7, 22, 24;
461.21; 462.3; 505.17;
582.20; 588.16
mostly 522.14
mother's 524.3
motivated 399.22; 448.7;
459.3; 490.12
motivation 327.18;
328.20, 25; 345.7; 373.18,
20; 374.4; 434.14; 436.12;
437.6; 459.11; 466.24;
484.12; 488.6, 8; 490.18,
19; 491.6; 557.25; 561.23
motivation-to-quit
438.15; 439.12, 16;
449.17, 20; 450.5; 451.6;
453.3; 454.2, 7, 13, 14, 25;
456.5; 458.21, 25; 461.6;
462.21; 463.16; 464.3;
466.22; 469.23; 476.20;
488.12; 553.7; 558.4;
560.17, 24; 561.8; 576.18;
579.5; 584.17
motivations 473.20
motive 443.20; 474.14
mounted 500.25
move 291.20; 374.19;
491.5; 512.16; 522.23
moved 541.6
movement 557.10
moving 464.23; 513.24;
554.12, 14

MTQ 559.9
much 303.11, 14; 341.15;
347.8; 425.3, 6; 443.13;
460.3; 476.22; 489.22;
490.12; 527.23; 533.6;
550.15; 556.8, 10; 576.14;
583.25
multiple 298.25; 299.3;
343.4; 413.4; 458.10;
566.5, 10, 16
multivariate 434.3, 10
must 303.6; 334.11;
349.15, 17; 402.7, 10, 10;
526.18, 23; 527.3, 13, 17,
23; 528.6, 7
myself 425.4; 481.4;
482.16; 487.10

N

N 282.2, 2; 411.4, 4
name 285.20; 293.23, 25;
356.5; 420.20, 21; 440.15;
482.7; 499.24; 500.8, 9,
16, 17; 567.7
names 417.7; 581.11;
585.2
national 293.4, 5; 299.5;
305.2; 322.13; 327.8;
328.9, 13; 330.16, 20;
331.4
nature 499.6; 580.12
near 306.4; 436.3
necessarily 316.6;
324.11; 401.11; 414.11;
445.19; 446.20; 512.4;
513.2; 514.5; 521.20;
535.18
necessary 416.17; 419.3
need 330.3; 364.20;
366.21; 383.10; 401.17,
25; 402.4, 13; 417.3;
423.25; 424.15; 425.11;
427.23; 433.11, 15, 16;
458.24; 498.22; 531.15;
536.2, 6, 7, 8; 547.22;
563.11; 588.11
needing 286.18; 537.11
needs 332.19; 333.13,
23; 402.3, 12; 424.21;
425.7, 8; 426.8; 433.22;
533.7
negative 493.3
neighborhood 319.20
neither 334.2; 405.5;
506.12
Nevertheless 432.24
new 283.3; 284.21;
286.25; 287.2, 3, 7; 290.5;
295.11; 299.23; 300.5;
301.16, 19, 21; 303.25;
305.16; 314.6, 11, 15;
315.18; 316.12; 323.18;
324.4, 8, 14; 325.2; 330.9,
10; 357.24; 416.6; 418.9;
422.20; 445.7; 464.10;
466.3; 481.21; 495.20;

510:2
news 288:6; 296:8;
322:13; 468:14; 543:12
newspaper 287:20;
288:15; 290:15; 323:7, 9;
10, 12; 452:5; 567:13;
568:25; 569:4, 6, 7, 14
newspapers 327:8;
475:7
next 338:11; 508:16;
561:18; 581:14
nicotine 498:2
night 303:5; 308:25;
428:2; 462:12
noddled 419:15
non 366:13
non-empire 351:8; 352:4
non-zero 335:21
nonconscious 381:22
none 358:6; 366:5;
424:25; 352:6
nonrandomness 368:9
nonrepresentativeness
327:13
nonrespondents
313:13, 16
nonresponse 296:4;
304:20; 310:12, 13;
314:17, 20; 21, 25; 312:11;
22; 313:2, 23; 314:2, 7, 19;
320:13; 332:2; 358:15, 17;
359:22; 356:9, 11;
357:7, 12, 14, 20; 358:5;
18, 21, 25; 359:4, 7, 22;
360:14, 16, 23
nonsmoker 518:24;
523:9
nonsmokers 308:9, 10;
11; 318:19; 344:24; 363:7;
369:15; 423:23; 428:12;
429:5, 40, 21; 430:16, 17;
436:9; 507:9; 513:14;
15; 514:19; 516:7; 517:16;
521:6; 543:22
nonsubscribers 487:17;
488:10
not 334:2; 340:17;
378:13; 404:7; 405:5
noted 376:14, 16, 19
normal 313:15
normally 333:16; 373:12;
380:2; 386:25; 583:19
norms 376:18
northwest 300:14; 301:6;
384:12; 14
not-strong 506:21
notably 321:13
Notary 282:3
noted 411:3; 592:9
notice 302:10, 13
noticed 286:17
notion 445:17
number 295:15; 310:3, 7;
25; 311:7, 16; 312:7;
314:16, 21; 327:4; 332:23;

339:4; 343:15; 346:8;
356:24; 357:4; 361:20;
362:6, 9, 20; 363:16;
366:3; 427:11, 13; 431:23;
442:15, 19; 444:15;
457:21; 460:5; 505:8;
515:4, 5; 517:16, 16;
530:21, 21, 24; 531:6;
541:5; 545:23; 546:4, 24;
24; 547:3, 6; 550:13, 21;
553:9; 556:13, 20; 557:20;
568:19; 588:3; 592:8
numbers 288:9; 311:6;
322:4; 362:13; 367:13;
416:10; 427:14, 17, 18, 20;
25; 428:2, 5; 513:5; 514:16;
516:12; 547:4; 557:10;
558:7, 25; 580:8, 13;
581:18; 587:2, 3
numeral 377:7, 8, 12;
478:5; 579:2, 11, 21;
581:17; 583:5, 9, 9;
584:13, 15
numerical 578:16, 23
O 282:2, 4; 411:4, 4
o'clock 515:7
oath 282:18; 391:23, 23;
392:3, 7; 408:2; 537:10
Object 348:15; 470:23;
537:24; 538:9
objected 562:6
Objected 304:5; 312:14;
23; 313:19; 315:13;
316:16; 318:7, 23;
320:8, 24; 325:13; 332:3;
7, 21; 338:5; 334:7;
339:14; 338:3; 342:13;
347:16, 25; 348:8; 349:6;
350:20; 354:8, 17; 356:8;
359:18; 361:21; 362:22;
365:14; 369:18, 21;
378:23; 375:7, 19; 376:25;
378:22; 379:10, 16;
380:22; 381:3; 384:13;
385:16; 386:18; 387:12;
17; 388:11, 15;
390:6, 16; 391:7, 19;
393:16; 394:5; 395:4;
396:16; 397:6; 398:3;
401:21; 402:21; 404:5, 14;
406:15; 407:18, 22;
409:13; 411:19; 412:17;
421:22; 424:5; 426:17;
432:5, 9; 433:2, 12, 25;
434:7; 439:10, 22; 444:19;
445:2; 447:3; 451:12;
454:3; 455:13, 25; 460:8;
470:6; 471:4, 10; 472:14;
478:15; 479:5; 484:13;
485:21; 489:18; 490:8;
492:3; 496:5; 503:10;
504:25; 505:7, 16; 506:4;
512:24; 513:10; 519:7, 14;
22; 521:19; 526:4; 528:2;
529:15; 532:24; 533:13;
534:3, 16; 536:4, 17;

540:3, 16, 25; 542:3, 18;
547:16; 549:4; 550:9;
558:13, 18; 559:18; 560:3;
19, 25; 561:24; 565:8, 12;
568:7; 571:24; 572:11;
573:7, 15; 574:6; 575:17;
578:11; 579:13; 580:5;
583:16; 586:2
objections 537:22
obligation 302:16
obliged 307:21
observe 435:13, 14;
574:20
observed 304:25; 345:3;
17; 370:23; 371:8, 16;
372:13; 409:24
observing 409:20
obtain 302:16; 306:3, 9;
11; 353:17; 464:23; 549:2,
9
obtained 336:21; 452:18;
468:16; 489:14
obtaining 328:9
obviously 522:11;
574:18
occasion 569:5
occasions 346:5
occur 371:2; 375:8;
376:11, 11; 381:17;
409:17, 19
occurred 286:16;
312:21; 340:22, 22;
356:16; 370:24; 400:17;
401:2, 4; 413:11; 414:2
occurs 340:25; 357:15;
376:4, 5; 474:5
October 571:4; 572:2,
10, 15
off 303:12, 16, 19; 340:15;
395:20; 410:18; 442:17;
476:11; 482:22, 24, 25;
483:8; 502:7; 513:20;
515:14, 15, 18, 19; 552:13;
567:4; 569:17; 582:18, 19
offer 295:11; 296:14;
340:9; 378:18; 380:22;
405:3, 13; 417:14; 438:11,
14; 504:9; 532:3, 15;
537:13; 542:8; 576:11
offered 427:19; 547:5
offering 295:16, 22;
296:6; 439:6
offers 547:7
often 298:24; 299:12;
368:12; 371:9; 372:21;
414:3, 4; 491:20
Ohio 568:17
old 343:9, 11
older 343:12; 361:14;
406:19, 22; 407:2; 441:23
omitted 365:17
Once 284:2; 323:14;
337:10; 384:2; 410:12;
473:10; 489:20; 503:9;
563:21
One 287:10; 289:14, 23;

292:12, 14; 293:7, 22, 24;
296:24, 24, 25; 299:4;
300:5; 305:16; 312:20;
317:17; 324:18; 327:5;
328:5; 332:23; 333:24;
335:17, 19, 22, 24; 336:4;
337:9, 15; 338:6, 7; 339:5;
17; 343:3, 5, 6, 7, 10, 12;
15; 344:5, 9, 13, 16, 18;
24; 345:21; 346:2, 4, 16;
347:14, 17; 348:23, 24, 24;
349:4, 10, 15, 15, 17, 18;
350:3, 4; 352:12; 355:2, 2,
4, 7, 11; 357:23; 358:9;
359:23; 362:25; 363:6;
364:4, 14, 24; 368:5;
371:7, 19, 22; 372:6;
373:12, 14, 24, 25; 375:22;
376:19; 377:4, 13, 17, 21;
24, 25; 380:14, 16; 381:17;
382:10, 13; 384:4, 5;
385:11; 388:22; 391:4, 22;
396:22, 23; 397:13; 400:8;
17; 402:5; 406:7; 408:17;
17; 413:3, 5; 415:7;
420:14, 22; 423:3; 426:23;
433:22; 434:17; 443:15;
448:10; 451:25; 455:19;
456:4; 457:7; 461:15, 18;
463:6; 464:8, 18, 23;
467:18, 23; 468:11, 16, 20;
473:16; 474:2; 477:23;
480:9; 481:14, 15; 482:12;
18; 488:19; 490:23;
492:23; 503:14; 505:2, 9;
510:2; 514:8; 515:5;
521:9, 9, 13; 523:12;
529:25; 531:15; 533:3, 6;
542:19; 547:7; 548:10;
549:10; 550:3; 554:11, 13;
555:21; 557:11; 558:21;
560:15; 562:4, 14; 566:12;
14; 570:7, 9, 17, 21;
572:13; 574:2, 13; 576:24;
25; 577:4, 23; 578:25;
579:11; 580:12; 581:16;
24; 582:22; 587:13; 588:5
one's 384:16
one-page 559:8
ones 301:23; 305:3;
402:16; 420:13; 440:16;
19; 447:17; 498:22;
499:24; 501:8; 502:5;
570:2; 583:3
ongoing 327:9; 445:23
only 292:20; 297:21;
358:10; 368:14; 392:18;
398:21; 403:19; 413:19;
419:20; 427:20, 25; 430:4;
447:20; 448:17; 449:5;
452:3; 459:15; 472:4;
473:4; 474:2; 486:15;
489:16; 502:3; 503:14;
515:8; 522:10; 526:5;
529:22; 530:4; 532:14, 18;
546:20; 548:22; 549:5;
550:17; 569:5
onset 419:11; 440:6, 12;
441:11; 442:2; 492:2;
495:11; 496:4; 497:14;

498:21; 499:13, 22; 500:3;
502:18; 511:14; 521:5;
525:6, 7, 19
open 307:11; 383:11;
582:20
opinion 295:16, 22;
296:3, 6, 14; 297:3, 6;
298:12; 303:25; 304:19;
305:21, 24; 308:18, 23, 24;
309:8, 9, 11; 314:6, 12, 16;
315:19; 316:7, 17, 18, 19;
20, 25; 321:17, 25; 322:7,
8, 10, 18; 323:5, 18;
324:10, 13, 17; 325:16;
326:9, 21, 22, 23; 327:3, 4;
17; 357:13, 14, 24; 359:25;
376:21; 377:17, 18, 25;
378:3; 385:12; 386:12;
389:7; 390:13, 17; 393:25;
403:14, 22; 409:14;
425:21; 426:3, 4, 14, 20;
23; 430:11; 431:20; 432:2,
7; 433:4, 5, 9, 16, 22;
437:5, 13, 25; 438:3, 11,
15; 439:6, 17; 444:14;
447:21, 22; 448:5, 10;
449:2, 5; 454:22; 457:7;
458:18; 471:5; 491:25;
494:12; 495:7, 10; 498:8;
10; 502:17; 503:7; 504:9;
509:13; 511:12, 16, 25;
520:18; 521:4; 524:19;
528:3; 531:11; 539:23;
544:15; 546:7, 12; 549:21;
576:11
opinions 295:11; 296:19;
300:6; 302:18; 305:16;
307:13; 308:2; 314:19;
321:14, 22; 323:23; 324:4,
8, 15; 340:9; 367:4; 378:5,
18; 419:4; 428:4; 464:6;
468:2; 542:8; 575:23
opportunistic 445:21
opportunity 321:8, 10;
354:7, 9; 389:20
opposed 355:10
opposing 406:7; 408:12
opposite 406:7; 410:9;
493:12; 543:14
optimize 338:18
options 478:22
order 332:20; 333:14, 24;
338:12; 354:25; 401:17;
402:7, 14; 404:3; 424:2,
15, 21; 425:8; 428:24;
433:11, 17, 23; 462:5;
464:22; 481:22; 508:23;
527:18; 528:5; 545:18
ordinal 477:3, 5, 9; 480:5;
554:7, 10, 11, 16, 17, 18,
19; 555:6, 9; 556:20;
557:19; 579:2, 9, 14, 17,
17, 18, 19; 583:20
organization 287:11;
310:4; 453:24; 540:19, 24
organizations 449:14,
15, 19; 450:10, 21; 451:18
orientation 495:25;
497:9

<p>original 305:4; 415:20; 465:2; 522:20 originally 591:2 others 334:19; 340:8; 355:7, 10; 362:2; 401:13; 19; 403:15, 24; 406:10; 416:24; 420:15; 424:11; 454:23; 473:25; 474:3; 501:16; 543:13; 549:24; 568:8; 574:20 otherwise 426:7 ought 337:7 out 290:21; 303:3; 311:8; 334:15; 344:8; 355:13; 376:14; 16; 19; 410:12; 415:4, 6; 428:6; 443:23; 458:4; 460:18; 462:17; 469:37; 482:18; 486:4; 495:9; 500:10; 512:8; 514:5; 516:18, 22; 519:2; 9; 520:6, 24; 538:23; 544:19; 20; 20; 25; 548:3; 554:17; 556:13 outcome 486:10; 523:15 outdated 418:9 outline 337:3 outlined 317:3 over 282:25; 285:3; 288:7, 19; 292:9; 327:10; 355:6; 360:10; 387:8; 390:10, 18; 416:16; 430:22, 24; 438:8; 453:16; 457:24; 482:24; 507:6; 543:17; 547:23; 552:22; 553:2; 566:25; 576:8 overall 314:22; 321:5; 345:11; 416:14; 466:18 overestimated 549:22; 24; 551:3 overestimated 551:15; 16 overly 414:6, 7, 17 own 285:9; 287:6; 292:2; 24; 293:11; 327:14; 296:22; 326:13; 327:14; 340:19; 401:13; 403:5, 24; 25; 416:16; 418:2; 444:12; 470:18; 543:16; 562:8; 568:16; 580:23 owns 578:23</p>	<p>packs 550:16 page 383:8; 385:7, 10; 476:17, 18; 517:13, 14; 518:15; 590:6, 13; 591:14 pages 285:18; 291:9; 476:17 pairwise 466:20 paper 285:24; 286:20; 306:21; 357:23; 358:7; 359:23; 392:15; 540:6 papers 581:19 Paragraph 383:15, 17; 385:20; 476:18; 507:20; 508:3, 20; 509:6, 22, 24; 25; 510:12, 14, 511:4; 526:12, 14; 528:13; 534:2; 540:5, 18; 544:2; 553:13; 576:20 paragraphs 508:16 Parcel 496:16, 20, 21 parents 492:8; 503:19 parsimonious 461:21 part 282:24; 309:4; 313:22; 323:20; 363:10; 392:3; 434:9; 444:16, 17; 449:22; 453:23; 455:19; 478:17; 506:23; 550:12; 567:11; 570:10; 575:14; 587:12 participate 720:23; 499:7 particular 311:22; 318:10; 319:24; 320:2; 345:24; 355:10, 13; 345:9; 355:10, 18, 23; 354:12; 355:10; 357:7; 362:4; 373:5, 6; 376:7, 21; 378:5, 13, 15; 387:6; 400:20, 21; 402:13; 404:21; 408:11; 410:14; 413:3; 423:14, 15; 425:14; 434:22; 455:20; 536:18; 19; 568:9; 589:7, 9, 11 particularly 341:14; 351:11; 352:21; 389:21; 414:10; 415:14; 418:20; 496:22; 513:24; 581:2, 3 parties 578:13 partly 477:18, 19 party 371:11, 13, 21 past 341:17; 386:16, 25; 387:4, 7, 10, 15, 20; 388:2; 389:8; 390:24; 391:10, 15; 393:14, 22; 394:3; 395:2; 17; 396:5, 8; 447:9, 17; 456:6, 16; 505:10; 524:3 patches 498:2 path 338:4 pattern 371:3 patterns 304:25; 305:9; 12 pay 416:22 pays 587:13 peace 438:23 peculiar 357:8 peer 340:2, 4, 6, 11, 12;</p>	<p>14, 16, 18, 20, 25; 341:18 peers 492:16; 501:21 pencil 400:11, 23 Penny 590:10 people 297:22; 301:2; 310:4, 10, 14, 17, 20, 25; 311:10, 16, 17; 312:12, 21; 313:11; 317:11, 18, 20, 24; 318:22; 320:7, 22; 322:24; 325:4; 326:23; 327:11; 333:24; 334:18; 343:2; 344:23; 345:11, 13; 350:22; 352:8; 353:8, 8; 356:11, 13; 361:10, 11; 362:2; 365:17; 366:6, 20; 370:21; 375:4; 382:9, 11; 13, 387:4, 10, 14, 19; 388:2, 389:8, 19; 390:23; 391:9, 22, 25; 392:3, 7, 13; 17, 23; 393:8; 397:25; 398:7, 11; 399:5; 400:23; 402:17, 24; 403:10, 23; 405:9; 407:14; 409:15; 412:22; 418:16, 17; 419:6; 8; 421:4, 6; 423:22; 424:22; 425:10; 426:14; 18, 20; 427:21; 428:6, 8, 9; 429:16, 19; 430:23; 431:9; 16; 432:15, 23; 433:10, 15; 16; 434:22, 23; 435:11; 436:5, 21; 437:3, 13; 438:3; 439:17, 25; 443:18; 444:16; 446:3; 450:3; 455:10, 21; 457:21; 459:2; 461:10, 10, 11; 462:6, 9, 14; 463:7; 469:25; 470:15; 478:8, 20; 479:10; 481:21; 490:17; 491:11; 493:15; 497:2; 502:3, 5, 9; 503:14; 17; 512:6; 513:12; 514:4; 6, 10; 516:24; 517:14, 21; 25; 518:3, 4, 16, 23; 521:8, 11, 16; 522:5; 523:4, 5, 9, 18, 23; 524:7, 12, 16; 527:17; 528:15; 530:14; 24; 531:4; 533:10; 541:17; 23, 24; 542:6, 9, 15, 22; 543:3, 6; 551:24, 25; 552:2, 4, 8, 10, 16; 561:11; 565:6, 6, 7; 574:20; 581:3, 11; 583:5 people's 327:16; 339:5; 341:4; 371:11; 384:17, 18; 386:24; 390:2, 13; 395:9; 398:22, 23; 403:17; 426:5; 434:5; 441:10; 443:13; 447:11; 464:12; 508:23; 513:22; 524:11; 526:6 per 428:2 perceive 400:16; 511:17; 19; 520:15; 523:8; 536:14 perceived 376:17; 509:21; 511:3, 8, 521:23 perceives 523:11 percent 299:9, 9, 10, 13; 314:25; 315:3, 5, 318:14; 20; 319:9, 17, 21; 363:19; 22, 25; 364:12, 17, 365:24; 366:9; 403:10; 405:20;</p>	<p>423:17; 427:3, 8, 10; 428:11, 17; 430:15, 17; 433:22; 519:23, 24; 520:7, 20; 529:23; 530:5, 11; 531:8; 541:9, 9, 10, 13, 17, 24; 542:5, 9, 14, 15; 543:2; 549:20, 21, 25; 550:6, 7, 24; 551:2, 3, 13, 14, 15, 16, 20, 25; 552:3, 3, 4, 9, 16; 561:9, 10 percentage 311:10; 321:8; 362:5; 366:7, 7; 427:21; 428:6; 429:8, 16; 524:6, 528:15; 529:13; 531:5 Percentages 350:22 perception 339:18; 341:5; 400:9; 429:4; 508:24; 511:13; 512:22; 514:11; 519:19, 20; 540:12 perceptions 300:25; 301:12; 339:6; 384:18; 385:22; 430:2; 434:6; 508:14, 18, 25; 512:3; 513:22; 514:7; 517:22; 518:8; 524:10; 525:23; 526:6, 7, 9; 530:16; 537:7, 8, 9; 540:9 perfect 344:10; 475:21 perfectly 474:20; 475:9 performing 523:17 perhaps 371:20; 414:15; 416:22; 425:9; 515:11; 569:6 period 327:10; 390:11; 444:15; 505:10; 506:6 permit 301:9; 507:13; 581:20 permits 347:20 permitted 351:9; 580:12 person 312:17, 318:13; 343:2; 353:22; 361:17; 384:3; 394:24; 402:3, 10; 406:3, 4; 423:5, 13, 25; 424:15, 20; 425:15; 493:25; 496:12; 521:9, 24; 526:17, 18; 527:13; 532:20; 536:8; 538:7; 556:9; 581:6 person's 344:22; 409:18; 422:23; 426:9; 526:24; 528:10; 529:24; 530:6; 534:5, 14; 536:11; 539:24 personal 401:13; 520:15; 543:21 Personality 454:21; 495:22; 497:6; 582:21; 588:4, 22, 24; 589:16; 590:12 personally 316:25; 348:10; 368:18; 376:20; 421:14; 425:4; 480:22; 532:14; 539:2 persuasion 443:10; 588:17, 19 persuasive 441:9, 22; 442:4, 9, 24; 443:8;</p>	<p>444:24; 446:10; 447:15; 448:15; 452:18; 468:10 persuasiveness 449:11 pertaining 425:13 pertains 421:23 Peter 291:5, 20; 356:19; 411:6 Petty 588:3; 589:15 Pew 358:11 phenomenon 349:2 phone 453:11; 552:22; 553:3 phonetic 294:3; 420:19; 486:24 phrase 326:6; 355:20; 21; 397:11, 21, 23; 427:5; 479:10; 511:6; 532:4 phrased 388:13; 397:17; 18; 408:10; 513:23 phrases 583:6 phrasing 410:3 physical 409:20, 25 physically 482:17 picked 568:22 picking 561:7 piece 401:6; 402:10, 13; 424:21; 425:14; 534:17 pieces 306:21; 358:17; 392:14; 505:8; 523:19 pipeline 380:17, 19 pitted 315:22 place 330:6; 381:12; 390:3, 14; 438:5; 452:16, 24 placed 578:25 places 482:21; 580:25 placing 407:25 plaintiff 283:22; 294:21 Plaintiff's 570:8 plaintiffs 291:18; 296:20; 566:6; 568:10; 569:19, 22; 570:18 plan 329:19, 20, 330:9; 331:12, 14; 417:19 plans 351:2; 418:3, 13; 438:21; 494:15 play 403:12; 492:8, 16, 18, 21; 532:11, 13 played 501:15 playing 403:21 please 289:10; 296:12; 336:25; 350:16; 365:12; 367:15; 370:6; 374:23; 382:5; 439:20; 440:13; 504:12; 505:2; 510:6; 511:11; 532:8; 540:6; 544:2; 561:4; 571:6; 584:24; 590:2 plenty 307:19; 523:12 plus 283:19; 554:19 point 343:13; 366:23, 25; 370:9; 402:9; 439:2; 460:12; 463:22; 476:8; 478:22; 479:13; 494:2; 522:14; 561:7; 569:12;</p>
---	--	---	--	--

581:19; 585:24; 589:21 points 468:11; 554:12, 21; 555:2, 3 political 371:11; 454:19, 20; 590:5 Polling 591:5 polls 540:19, 22 popular 292:8; 416:9; 495:2 popularity 495:16, 17 population 300:21; 305:20; 305:3, 11; 314:24; 315:25; 316:16; 325:8, 11; 326:11; 335:18, 21; 339:10; 351:25; 360:14; 361:7; 369:10; 371:18; 405:21; 464:20; 489:16; 499:10, 13, 17, 19; 541:17, 540:7 populations 405:23 portion 291:14 position 353:23; 354:12, 13; 376:10; 378:18; 402:3, 12; 489:20; 425:5; 433:14; 434:5; 501:17; 523:21, 524:2 possibilities 337:7, 15; 346:3 possibility 314:22; 320:19; 337:4; 346:13; 372:12; 374:25; 390:23; 489:1 possible 297:8, 14, 19; 298:12; 301:17; 359:10; 12, 24; 346:22; 489:1 362:3; 386:11; 402:8; 480:13; 470:11; 556:6, 18; 522:21; 577:24; 578:10; 579:11 possibly 372:9; 556:9 Post 325:3 post-hoc 383:20, 24; 384:24; 385:14, 18; 386:3 potential 334:24; 335:2; 337:17; 24, 25; 353:3, 5, 21, 24; 354:22; 361:9, 16; 382:16, 18; 384:11; 386:17; 387:11, 20; 389:10, 13, 25; 391:24; 390:13; 406:19; 407:9, 16; 409:8; 468:19; 522:24, 24; 570:23 potentially 286:22; 377:22; 384:7; 468:8; 568:13 power 464:22; 468:17, 21, 24; 469:7; 472:16, 21; 489:22 powerful 376:14, 16, 480:11; 558:23 powerfully 389:21 practice 454:16; 586:6 practices 341:23; 417:8 precisely 482:13; 556:22 precision 462:16, 18 precursors 461:3 predesigned 414:4 predict 338:12; 398:16; 502:4; 503:8, 16; 525:6, 19 predicted 435:20, 21; 560:17 predicting 521:4; 525:7 prediction 436:3 predictor 493:8; 497:14; 501:19, 21; 504:22; 505:6, 15; 506:3, 15, 18, 18, 20, 21, 25; 507:4 predictors 492:2, 5, 6, 10, 14, 15, 25; 493:2, 3, 4, 6, 11, 14; 494:4, 11, 17, 19, 21; 495:11, 14, 22, 23; 497:7, 18, 20; 498:10, 14, 17; 501:13, 14; 502:17, 25; 503:6, 22, 25; 504:2 prefer 334:10; 468:9 premise 385:3 prepare 307:22 prepared 285:24; 438:11 preparing 294:25 prescribed 414:3, 5; 468:2 prescriptive 425:6 present 305:13; 354:7; 356:18; 357:7; 379:24; 380:3, 6; 381:13; 384:11, 25; 389:9, 19; 396:14; 397:2; 398:7; 406:18; 410:11; 461:21; 468:19; 469:12; 496:13; 558:10; 580:13 presented 393:2; 445:8, 21; 550:24; 558:7, 8, 17; 561:9 presenting 395:8 presents 396:18 president 338:10 presidential 338:9 press 288:6; 291:13; 292:8 Presser 357:25 pressures 37:6 presumably 410:8 pressing 337:17; 336:8; 341:15; 439:4; 489:21; 523:11; 571:15 prevent 542:11 preventers 459:25 preventing 419:11 preview 563:7 previously 285:6; 296:10, 16; 297:4; 321:21; 322:21; 341:24; 355:16; 396:24; 408:20; 409:2 primarily 285:7, 15; 448:8; 497:24 primary 289:25, 403:9; 432:15 principal 339:13; 398:15 principally 403:11 principles 355:5, 8; 468:24 printed 395:21; 514:15 printout 328:16, 21; 329:4; 514:25 printouts 487:2; 489:4 prior 283:2; 299:25; 322:22; 417:16, 23; 418:2, 506:8, 11; 566:24; 572:10 probabilities 423:24 probability 335:21; 371:16; 385:14; 386:2; 423:5, 13, 21, 21; 520:15; 524:4 probably 291:9; 331:10; 458:16; 514:23; 530:10; 588:5 probe 541:22 probing 414:7, 12 problem 332:2; 352:23, 24, 25; 353:3, 5; 357:8, 15, 21; 358:18, 19; 359:2, 5, 17; 375:6; 382:15, 16, 18; 384:11, 19, 22, 25; 389:10; 391:6, 6, 8, 9; 396:15, 18; 399:7; 409:12; 550:12 problems 322:6, 17; 352:17; 436:17; 437:2; 475:5, 24, 25; 491:16 procedural 354:2 procedure 313:9, 15; 341:19; 20, 21, 21, 22; 342:14, 15; 353:7; 366:5; 369:11, 14; 589:20 procedures 317:8, 13; 341:16; 342:11; 350:2; 355:3; 367:12; 368:6; 378:15; 379:3, 6; 417:13 proceed 366:21 proceedings 392:4 process 288:22; 311:22; 318:2, 4; 320:15; 326:25; 332:5, 10, 12; 337:11; 339:25; 340:6, 25; 341:7, 19; 342:19; 346:5; 347:10; 361:8; 368:4, 4, 8; 369:13; 492:22; 498:3 processes 351:23 processing 341:21; 588:18 produce 337:13; 360:20; 377:9; 464:18, 22; 473:16, 20 produced 285:17; 301:24; 329:3; 346:9 produces 543:20 product 415:17 profession 482:2 professional 402:2; 433:14 professionals 318:3; 543:13 Professor 285:17; 289:6, 13; 290:2, 19; 415:21; 417:18; 421:12; 427:18; 529:6 program 486:25; 487:20 programs 419:22; 420:4; 499:7, 8, 13, 17, 21, 25; 504:6 progressively 554:12 projects 419:11; 420:10 prominently 327:7 pronounced 406:13 proper 332:24; 334:4, 11; 362:20; 365:2; 415:25; 469:22, 24; 470:15; 473:8 properly 332:19; 333:13, 23; 334:8; 335:9 properties 477:13; 554:19 proportion 548:2 proposition 359:14, 15; 504:15, 17, 24; 580:20; 581:15 protect 390:22 protecting 399:22 provide 296:6; 302:17; 306:4; 307:2; 317:11; 332:9; 354:9; 361:8, 19, 22; 388:15; 389:17; 391:22, 25; 392:17; 411:8; 535:15; 583:5, 6 provided 287:2, 4, 8, 24, 25; 288:13; 289:20; 290:6; 291:16, 17; 292:25; 293:13, 24; 294:5, 9, 10; 302:9; 323:21; 327:13; 329:6; 350:24; 366:16; 394:14; 402:10; 415:17; 466:4; 569:21 provides 317:17 providing 307:14; 394:10, 13 psychological 435:17; 523:13 psychology 381:14; 421:12; 435:18; 443:11; 454:21, 22; 582:2, 16, 22; 584:23; 585:3; 586:13, 18; 588:5, 23, 24; 589:16; 590:12; 591:11 Public 282:4; 288:18; 291:12; 296:8; 315:19; 321:20, 24; 324:20, 22; 357:24; 359:24; 420:25; 441:7, 8, 16; 442:5; 443:2; 445:7, 8; 449:15, 18; 450:9, 21, 25; 451:11, 18; 452:5, 8, 9, 11; 454:22; 501:5; 531:9 publication 358:10; 547:20; 582:2; 587:7 publications 285:7, 15, 16, 23; 427:19; 481:13; 500:18 publicized 296:8; 322:13; 445:17; 464:7; 468:14 published 292:3; 316:13; 319:19; 324:25; 327:7; 358:7; 359:24; 420:15; 444:2; 454:16; 481:16, 18, 22; 500:11; 501:7, 9; 580:25; 581:11; 585:6, 15; 588:3, 23; 590:4, 11, 15, 24; 591:2, 4 publisher 585:17 publishers 585:2 pulled 569:17 purchased 475:6 purely 354:6 purpose 354:13; 434:24; 470:10; 559:13; 567:18, 22 purposes 354:6; 408:4; 468:2; 568:13; 570:13; 578:16 pursue 442:13 push 397:4 pushed 355:9 pushing 408:17 put 302:25; 303:17; 320:2; 333:20; 358:20; 365:20; 408:5; 462:5; 475:17; 504:15; 562:15 puts 494:10 putting 392:3, 7; 415:21 puzzled 418:4	588:3, 23; 590:4, 11, 15, 24; 591:2, 4 publisher 585:17 publishers 585:2 pulled 569:17 purchased 475:6 purely 354:6 purpose 354:13; 434:24; 470:10; 559:13; 567:18, 22 purposes 354:6; 408:4; 468:2; 568:13; 570:13; 578:16 pursue 442:13 push 397:4 pushed 355:9 pushing 408:17 put 302:25; 303:17; 320:2; 333:20; 358:20; 365:20; 408:5; 462:5; 475:17; 504:15; 562:15 puts 494:10 putting 392:3, 7; 415:21 puzzled 418:4
--	--

Q

Q 562:11 qualification 386:21 qualified 366:14, 16, 18; 370:13; 376:20; 378:4, 10 qualify 419:4 qualitative 458:8 quality 298:4; 341:17; 415:3, 5; 417:10; 462:11; 499:6 quantification 477:18 quantified 477:17; 578:21 quantifies 477:25 quantify 555:5, 14; 556:2, 6, 13 quantitate 555:5 quantitative 577:23; 578:3, 9 Quarterly 315:19; 357:24; 359:25; 454:23 questioner 413:19 questioners 409:24 questionnaire 335:25; 341:20; 363:3; 414:16; 451:17 questionnaires 355:7; 368:11 quickly 291:10 quit 301:13; 327:19; 328:20, 25; 339:11; 345:7, 13, 15; 373:19, 21; 374:4; 403:10; 424:3, 16; 426:15, 21, 21; 430:24; 432:11, 13, 15, 23, 23; 434:14; 436:2, 6, 7, 8, 12, 20; 437:6, 14, 14, 15; 451:24; 458:23; 459:3, 6, 11; 462:15;

466:24; 473:18; 484:12;
488:6, 8; 490:7, 12, 18, 18,
19; 491:6; 502:5; 503:17;
557:25; 561:23; 579:7
quite 286:11; 300:24;
344:2; 351:24; 352:12;
397:17; 405:22; 416:16;
427:5; 441:18; 443:11;
476:24; 478:2; 479:7;
495:21; 506:14; 550:25;
553:17; 577:3, 11; 578:5,
15; 579:23; 582:5; 584:10
quitting 345:14; 403:9,
13; 436:3; 441:12; 447:11;
462:17; 497:30, 23;
503:25; 504:4; 522:22
quote 567:13
quotes 397:3; 450:14;
452:1; 453:8, 25;
464:6, 8, 11; 465:8, 13;
474:2; 476:12, 13; 475:22
quoting 425:17

R 282:2; 411:4
R.J. 482:8
raise 286:13; 314:22;
385:7; 398:8; 548:15
raised 343:3; 347:4
raises 349:16
random 567:13, 22;
368:10; 369:4, 14; 514:8
randomized 380:14
randomly 368:13, 16, 20,
24, 25, 29; 332:4
randomness 367:7, 11,
17, 19; 368:3, 6, 8
range 283:19; 530:20;
531:3; 552:10
ranging 482:2; 556:17
rare 355:13
rarely 458:2; 520:4
rate 288:20; 296:4; 299:8;
12; 300:23; 338:13, 13;
311:18, 20, 25; 312:2, 11,
22; 313:2, 11, 23; 314:2, 8,
13, 13, 23; 315:9, 9, 10,
20; 316:4, 7, 10, 14, 16,
20; 317:2, 19; 318:5, 8, 10,
14, 21; 319:5, 8, 13, 15,
17; 320:5; 332:2, 2;
358:13, 13; 359:16; 360:5,
5, 22; 362:19, 23; 363:17,
18, 24; 364:7; 365:13; 365:9,
18, 22; 366:4, 8; 543:23
rates 287:15; 290:9;
315:23, 24; 316:2; 319:20,
22; 358:6; 359:7, 21;
360:3, 4, 12; 361:3;
338:17; 441:11, 12;
511:22
rather 381:21; 400:23;
145:20; 480:16; 481:6;
338:16
rating 405:3

ratio 423:24; 511:23;
512:2, 22, 25; 513:3, 7, 12,
16, 18; 522:6; 523:24;
524:7; 554:2, 3; 556:16;
557:5
rational 424:2, 6, 10;
532:20, 20, 533:3, 10
rationale 582:14
rationalization 383:20,
25; 384:9, 24; 385:15, 18;
386:4
ratios 514:17; 555:24;
557:10
re-initiation 460:2
reach 297:6; 298:12;
301:18; 350:3; 352:8;
385:25; 486:13, 15; 531:4;
543:16; 558:23; 561:13;
562:4
reached 417:2; 452:19;
465:15
reaching 408:15; 411:24;
449:2; 494:9
reactions 435:22; 443:24
read 283:4; 285:18, 22,
23, 24; 291:14; 296:11, 13;
325:3; 329:19; 337:2;
365:13; 367:15; 368:5, 7;
406:22; 408:23; 414:4;
420:17; 437:17, 18;
439:21; 450:13; 451:21;
456:13, 14; 457:24, 25;
479:6, 7; 510:3, 6, 17, 20;
533:25; 544:12; 566:20;
569:12, 25; 574:8
readable 290:3
reading 282:23; 307:25;
331:14; 494:9
reads 410:17
real 468:19; 472:24;
473:6
really 332:23; 371:18;
383:4; 384:14; 400:19;
401:4; 470:19; 493:10, 24;
494:21; 546:19; 580:21;
581:5
reason 286:19; 317:3;
320:12; 332:13; 334:17;
378:3; 385:7; 398:15;
416:3; 432:15, 18, 19, 20;
468:8; 475:20; 480:10;
489:19; 506:13; 542:23;
545:21; 547:13, 18; 561:2
reasonable 345:10;
385:13; 386:2, 8; 392:4,
10; 419:5; 438:12; 441:19;
446:25; 447:6; 464:21;
477:13; 525:20; 568:23,
571:8; 578:22; 580:7
reasonably 462:9
reasons 346:18; 432:24;
491:11, 11; 502:9, 9;
532:25; 555:13
reassure 487:10
reassured 487:11
reassuring 346:23
rebelliousness 495:24;

497:7
recall 292:12, 19, 21;
386:16, 24; 387:4, 7, 15,
19; 388:2; 389:8; 390:2,
10, 12, 13, 18, 23; 393:5,
14, 22; 431:4, 13; 489:9,
13; 500:16; 585:13, 15, 17,
19, 21, 23; 588:14; 589:3
recalls 390:19
receive 307:7
received 289:5, 8, 11, 24;
308:25; 309:12; 362:11,
441:21; 475:3; 489:4;
566:2, 6; 570:20
recent 440:21; 447:24;
582:18, 21; 588:17
recently 285:6; 298:6;
322:6; 588:15
Recess 303:20; 357:2;
410:19; 476:12; 546:2
recognition 441:25
recognize 320:14;
441:24; 526:23; 527:13;
534:13; 539:24
recognizes 482:2
recognizing 536:11
recollection 431:15, 18;
567:17; 569:20
recollections 391:15
reconstruct 347:8
reconstructed 347:9
Record 296:13; 302:25;
303:12, 14, 16, 17, 19, 22;
324:3; 337:2; 347:9;
365:13; 367:16; 370:7;
410:18; 411:7; 437:18;
439:21; 442:17; 476:11,
14; 482:22, 24, 25; 483:3;
515:18, 19, 21; 540:17;
559:17; 562:23; 566:9;
567:4
recorded 346:6; 526:8, 9
recording 336:5; 348:12
records 283:16; 346:10
recoupment 571:17
recover 571:17
redepose 566:24
reduce 375:8, 10, 11;
382:14; 385:22; 493:24
reduced 319:15; 359:21;
469:19; 470:14
reduces 408:6
reduction 408:2; 462:17
refer 333:17, 18; 342:25;
402:23
references 583:2
referred 288:3, 9; 355:17;
382:2; 477:2; 583:20
referring 368:3; 392:22,
25; 393:7; 394:23; 449:21;
478:18; 501:8; 505:9;
506:5; 583:4
refers 400:20
reflected 395:3, 5, 18, 19,
21; 521:8

reflects 333:10
refresh 567:17
refuse 313:11
refused 312:9, 18;
314:17; 320:22
regard 293:22; 304:22;
333:3; 378:2; 395:11;
404:22; 408:4; 421:2, 4,
17; 452:19; 522:10;
525:23; 530:2; 576:12
regarded 318:6, 21;
421:3
regarding 403:15
regardless 405:21;
465:15; 524:13, 17
region 300:14, 15; 301:6;
304:15
regions 300:17; 301:15;
304:12, 14
registered 400:13
regret 301:13; 339:11;
436:4, 5, 20; 451:24;
459:5; 460:6, 16; 461:2;
462:3, 4; 473:17, 21;
476:23; 478:6; 553:10, 16,
17, 23; 554:5, 14, 15;
555:21; 556:9, 10, 10, 11;
576:19, 24; 577:3, 5, 9, 11,
16, 18, 20; 578:4, 4, 5, 6;
583:25; 584:9
regrets 553:22
regretted 460:10, 14
regretting 578:15, 17, 18
regular 322:2, 12; 384:3
regularly 355:22; 366:20;
384:5
reinforce 330:4
related 320:10; 344:9;
347:7; 371:12; 381:15
relation 339:9; 576:4
relationship 343:5;
370:19, 22, 24; 371:15, 17;
373:14; 374:9; 485:24;
496:3; 511:13; 563:23, 24;
568:2
relationships 371:8;
374:18; 560:23; 564:8
relative 300:25; 301:12;
329:21; 339:6, 18; 341:5;
344:19; 422:20, 21, 22, 25;
423:7, 10, 20; 425:24, 25;
426:2, 12, 16, 22; 428:16;
18; 433:10, 17, 23; 434:5;
449:10; 452:2; 507:25;
508:8, 11, 15, 18, 25;
509:21; 511:3, 7, 9, 14, 17,
19, 21, 22; 512:2, 22;
513:6, 8, 16; 514:4, 6, 17;
515:24; 516:5, 11, 15, 25;
517:19; 518:10, 17;
520:10, 13, 22, 23; 521:11,
18, 23; 522:2, 3, 6, 8, 11,
16, 19, 25; 523:4, 5;
524:20, 22; 525:2, 9;
526:7, 9; 530:16, 18, 22;
534:22, 23; 535:2, 6, 7, 10,
16, 19, 22; 536:8, 14, 20,

22, 23; 538:5; 539:4, 5, 14
relatively 349:22, 23,
360:2, 3, 12, 22, 368:5
relaxation 495:18
relaxed 495:3
relevance 371:4; 430:10;
460:3; 474:9; 537:20
relevant 282:23; 287:20;
288:4; 292:4; 317:6, 7, 15;
371:6, 23, 25; 444:9;
459:18; 461:5; 485:7
reliability 300:18, 19;
328:19, 24
reliable 319:21, 23;
389:3; 399:15; 427:13;
464:19; 503:24; 506:15;
543:9
reliably 407:8; 469:6
reliance 501:10
relied 309:22, 24; 323:22;
325:11, 15, 17, 19, 23;
326:5, 6, 11; 330:5, 575:7
reload 565:20
rely 305:24; 323:5;
333:24; 386:25; 419:6;
575:12, 16
relying 309:14; 310:24
remaining 530:13
remember 282:17;
283:11; 286:6, 16; 292:15;
294:2; 352:18; 367:8;
391:9; 392:8, 24; 393:6, 8,
9, 14; 394:3; 419:18, 20,
24; 484:6; 488:16; 489:8,
23, 24; 547:8; 556:25;
557:4; 569:13; 570:2, 19;
574:9; 580:15; 584:25;
585:5, 14; 589:10, 11
remembered 289:24;
293:18
remembering 293:14;
294:13; 380:24; 395:2, 15,
16, 17; 400:20; 489:5
rendering 468:3
repair 286:18
repeat 318:17; 498:22;
555:23
repeatedly 436:22
replicability 300:19
replicate 330:24
replicated 305:2
report 285:19; 286:15;
287:10; 288:23; 289:19;
293:24; 295:17; 305:5;
336:3; 350:17, 23; 351:5,
6, 13; 352:3, 6; 361:23, 25;
362:6; 363:22; 366:14;
374:15; 383:6; 385:8, 10;
403:4, 7; 415:20; 425:16;
431:10; 440:17; 443:25;
456:2; 465:2; 476:16;
481:9; 487:3, 15; 488:2,
17; 504:11, 12; 507:17;
511:8; 526:10, 12; 531:20;
553:13; 558:7; 576:20
reported 295:17; 297:23;
344:23; 564:9

reporter 496:14, 571:14
reporting 344:4
reports 285:9, 21;
293:21, 329:7, 391:25,
392:17, 398:23, 420:17;
535:14, 15
represent 330:22, 405:3;
482:8, 514:25, 567:8;
570:9
representative 295:18,
298:13, 300:8, 10, 304:20,
336:3, 361:13, 452:11
representativeness
296:16, 297:3, 13, 298:17,
299:19, 22, 300:3, 304:2,
320:11
representatives 283:22
representing 479:16
represents 557:10
reproduction 289:12,
290:18
Republican 371:21, 22
reputable 417:5, 421:17;
444:17
REG 302:2, 306:25;
309:16, 323:10, 562:11,
22
request 288:16, 22, 23;
295:19, 562:20, 22, 24
requested 411:9
requied 425:15
requires 396:19, 434:8
reread 285:9, 21
rereviewing 284:20
research 294:11, 315:17;
317:19, 318:22, 327:14;
333:5, 334:13, 23, 337:20;
340:16, 341:7, 17, 351:20;
353:3, 354:21, 356:7;
358:4, 8, 361:3, 370:17;
371:5, 374:20, 375:6;
376:3, 6, 382:17, 384:12,
16, 385:25, 386:17, 387:2;
396:15, 22, 397:16, 398:9;
399:25, 400:4, 19;
403:2, 405:19, 416:9,
417:6, 16, 23, 418:2, 5, 8,
9, 22, 25, 432:14, 17, 22;
435:18, 443:23, 444:13;
457:10, 508:7, 10, 542:13;
543:5, 584:22, 585:2;
586:17, 587:15, 590:17,
591:3, 5, 11
researcher 340:7, 354:2,
374:16, 381:19, 421:18
researchers 355:23;
376:9, 13, 15, 18, 378:4,
10, 17, 457:3
resemble 295:24;
300:24, 301:9, 305:19
reserve 323:16, 566:23
reside 494:22
resident 361:17
residents 361:14;
363:13, 14
resolution 424:8

respect 314:13, 484:7;
487:12, 490:2, 494:16;
497:18, 500:2, 551:5, 9;
553:16, 580:9, 589:6
respectively 516:12
respond 320:7, 7
respondent 342:14;
344:25, 361:16, 381:18,
20, 396:13, 13, 397:4;
413:8, 427:2, 6, 428:19,
19, 429:4, 430:16
respondents 297:21;
301:6, 314:16, 330:14;
336:3, 339:19, 20, 21;
344:17, 20, 345:20, 347:6;
355:6, 9, 361:9, 368:12,
14, 372:4, 13, 375:2;
377:4, 379:7, 380:11;
392:14, 394:18, 396:19;
399:21, 405:5, 10, 405:20,
28, 406:5, 19, 20, 23;
408:2, 409:20, 23, 427:7,
9, 428:11, 429:6, 430:14;
436:11, 437:7, 10, 11, 14,
15, 20, 458:2, 11, 473:4,
24, 25, 474:6, 480:8;
483:8, 484:8, 19, 490:4;
514:16, 515:23
responding 407:10
response 288:20, 290:9;
299:8, 12, 312:2, 10;
313:11, 314:13, 23, 315:5,
8, 316:23, 24, 316:2, 4,
7, 10, 14, 16, 20, 317:2,
15, 319:5, 8, 10, 14, 20;
319:7, 15, 17, 20,
22, 320:5, 10, 15, 323:7;
326:6, 13, 33, 359:7, 16,
21, 360:2, 3, 4, 5, 12;
361:3, 362:19, 25, 363:17,
18, 364:7, 9, 11, 365:9,
16, 366:4, 8, 376:4, 8,
10, 377:20, 378:14;
380:14, 381:16, 17,
404:20, 21, 23, 405:16;
406:23, 408:3, 17, 443:14;
458:8, 477:15, 19, 479:17;
521:15, 522:2
responses 291:21;
349:6, 373:7, 377:5;
388:12, 399:11, 537:9;
555:9, 9, 12, 576:23;
577:24, 578:10, 579:2, 9,
12, 14, 17, 580:12, 581:16;
583:9, 20, 24, 584:4, 7, 9
responsibility 445:16
rest 309:5
restarting 460:18, 22
restate 510:18, 19, 21;
530:3, 572:13, 583:12
result 292:25, 295:9, 12;
321:16, 327:7, 337:13, 14,
348:22, 353:18, 20,
358:15, 372:15, 422:24;
426:6, 457:20, 571:18,
580:22
resulted 379:20
results 287:12, 289:19;
297:16, 300:18, 20,

315:21, 321:5, 331:6;
334:19, 348:7, 22, 349:17;
350:2, 18, 23, 351:13;
352:3, 11, 15, 353:10;
355:13, 356:15, 360:20;
373:10, 13, 22, 25, 374:2,
3, 6, 389:2, 408:7, 434:4,
452:17, 18, 461:18, 22;
462:24, 463:3, 489:6, 8,
544:6, 8, 580:14
resumed 411:4
revealed 401:3
reversed 454:4
review 295:9, 340:2, 4, 6,
13, 25, 415:12, 416:4;
450:25, 454:19, 501:4;
521:21
reviewed 284:19, 24, 24,
25, 285:14, 288:2, 291:25;
292:24, 293:11, 294:9;
295:8, 21, 297:7, 301:17;
305:23, 308:24, 309:8;
323:5, 340:11, 14, 16, 18,
20, 341:18, 403:3, 7,
420:16, 568:6, 569:11
reviewing 286:7, 20;
292:9, 294:24, 307:25;
321:16, 501:5, 503:23;
540:18
revolutionary 445:14
Reynolds 482:8
Richard 358:2, 588:3;
589:15
right 284:21, 289:21;
290:10, 11, 294:17;
296:24, 300:3, 303:3;
311:18, 312:2, 3, 314:9;
316:22, 321:9, 323:2, 8,
16, 326:20, 331:24, 340:2;
347:21, 363:19, 364:4;
367:7, 372:22, 378:7;
397:9, 402:20, 408:24;
409:5, 9, 418:5, 419:12;
427:4, 11, 428:12, 430:17,
21, 22, 431:17, 432:21;
433:4, 439:13, 14, 450:11;
454:9, 456:19, 459:3;
463:7, 8, 468:3, 6, 469:20;
470:17, 471:19, 24, 472:7;
473:3, 476:20, 478:14;
479:4, 480:19, 23, 482:9;
483:13, 20, 485:22, 486:5;
488:8, 491:23, 493:4;
494:20, 497:12, 499:2;
502:7, 509:9, 510:10;
512:12, 513:7, 514:14;
516:5, 15, 518:5, 21;
519:2, 520:14, 521:7;
524:25, 527:8, 530:9;
532:3, 536:3, 19, 542:6;
544:12, 545:4, 17, 550:25;
554:7, 555:18, 557:25;
558:10, 559:14, 561:19,
23, 565:19, 21, 22, 566:4,
19, 23, 567:15, 572:10;
575:8, 576:25, 577:8, 9,
11, 13, 15, 19, 20, 21, 24;
579:10, 583:23, 584:5;
585:23, 586:9, 587:5, 9,

25, 589:24, 591:12
rises 524:3
risk 301:12, 329:21;
339:6, 18, 341:5, 344:19;
385:23, 407:13, 422:20,
21, 22, 423:2, 2, 3, 7, 10,
10, 12, 20, 425:19, 23, 24,
24, 25, 426:2, 3, 8, 10, 13,
16, 22, 428:17, 18, 432:3,
8, 25, 433:6, 6, 10, 17, 17,
20, 21, 23, 24, 434:5;
474:23, 25, 507:24, 25;
508:8, 11, 15, 18, 24;
509:2, 9, 17, 21, 23, 511:3,
5, 6, 7, 9, 9, 14, 17, 19, 22,
23, 512:2, 3, 22, 23, 513:6,
9, 16, 514:4, 6, 11, 17;
515:24, 516:6, 11, 15, 18,
25, 517:4, 19, 22, 518:8,
10, 12, 17, 18, 23, 25;
520:10, 13, 21, 22, 23;
521:11, 18, 23, 522:2, 3, 6,
8, 11, 13, 16, 18, 19, 25,
25, 523:4, 5, 8, 524:20, 23;
525:2, 2, 9, 13, 526:2, 7;
530:16, 22, 534:22, 535:6,
7, 11, 16, 19, 22, 536:15,
20, 23, 23, 538:5, 539:5, 5,
14, 543:8, 544:11, 18;
545:7, 15, 546:9, 14, 21;
547:11, 15, 21, 548:9, 12,
20, 549:2, 9, 18, 23, 550:5,
8
risk-taking 495:25;
496:4, 497:4, 8, 8
risks 300:25, 385:22;
423:25, 424:15, 426:5;
430:13, 445:15, 525:22,
24, 526:6, 8, 9, 18, 527:8,
13, 19, 528:14, 18, 529:12,
14, 530:18, 531:13, 16;
532:22, 533:12, 12, 16, 22;
534:23, 535:2, 546:20
risky 433:10
role 403:13, 21, 492:8,
17, 19, 21, 501:16
Roper 287:10, 12;
288:22, 289:16, 290:7
round 552:13
routinely 297:16, 298:3;
424:23
Rubin 421:9, 422:6, 10
Rubin's 422:3
rule 417:7

S

S 282:2, 411:4
safe 531:10
safer 542:6
sake 566:11
same 299:2, 300:20;
305:12, 309:19, 319:18;
344:2, 347:25, 348:22;
352:8, 359:13, 368:13;
414:19, 423:23, 437:3;
444:9, 458:6, 461:18;
462:2, 463:3, 464:20;
465:14, 472:11, 477:14;
478:8, 490:24, 491:18;
497:21, 498:4, 16, 22, 24;
505:7, 512:2, 2, 21, 22;
513:8, 12, 16, 514:10;
516:24, 517:3, 10, 11, 21;
518:7, 536:19, 537:2;
538:10, 21, 539:8, 10, 12;
543:23, 544:14, 573:9;
577:22, 578:3, 16, 579:4;
580:2, 589:24
sample 296:15, 297:4,
12, 299:8, 20, 22, 300:3;
301:15, 305:2, 320:11;
331:3, 335:19, 23, 361:13;
368:16, 18, 20, 22, 23;
369:3, 10, 413:12, 428:24;
468:22, 22, 25, 561:9, 10
samples 330:17, 489:22;
528:16
sampling 335:17;
341:19, 342:14, 354:24,
25, 355:3, 368:3, 4, 6, 7,
369:14
sat 568:14, 16
satisfy 331:25
saw 289:4, 306:12;
311:20, 445:10
saying 311:24, 313:15;
316:10, 334:6, 352:6;
389:18, 395:7, 396:6;
397:19, 418:8, 436:25;
438:22, 445:19, 446:7, 11,
19, 455:15, 474:23, 25;
475:21, 23, 480:23, 485:7;
492:25, 493:19, 498:13;
499:12, 502:2, 503:13;
513:11, 527:17, 556:19;
578:17, 586:5, 587:24
scale 301:13, 405:3;
445:12, 462:2, 478:19, 21;
553:15, 25, 554:2, 3, 7, 8,
9, 10, 10, 11, 16, 19, 21,
22, 23, 555:3, 6, 556:14,
15, 16, 17, 21, 23, 558:8,
11, 576:17, 583:14
scales 477:15, 554:18
scaling 556:4
schedule 302:11, 12
scheme 330:10
School 420:25, 453:21
science 334:13, 341:17;
399:4, 400:19, 402:2;
454:19, 20, 558:16, 590:5
sciences 400:4, 416:6;
481:17
scientific 316:4, 322:14;
339:25, 385:13, 24, 386:2,
8, 13, 419:5, 438:12;
440:14, 447:2, 7, 534:21;
543:8, 10
scientist 402:11, 425:5
score 466:23, 24, 553:20;
556:11
scores 555:21, 561:8
Scott 358:9

script 414:15
search 568:17; 589:15
second 293:24; 338:20;
339:7; 358:7; 365:16;
371:25; 377:5; 380:16;
383:11; 384:6; 400:18;
405:7; 431:22; 457:23;
510:3; 515:16; 516:21;
522:42; 582:25
secondly 327:9; 339:20;
366:17; 392:42; 526:23
seeing 299:18; 346:23;
396:6; 399:20, 21; 431:15;
546:24; 580:3
seeking 363:12
seeks 355:7; 571:17
seem 347:5
seemed 464:12; 479:6;
568:21, 23
seems 392:4; 546:25;
571:15; 588:10
sees 355:11
segment 334:21; 325:7;
11; 326:10
segments 360:13
segregated 308:14, 16
select 368:16, 18, 20, 22;
478:2
selected 287:19; 309:3;
310:21; 311:13; 312:13, 16;
314:17; 335:23; 356:14;
368:24; 569:2, 3, 9
selection 335:22;
342:15; 477:18
self-deception 381:9;
24; 382:15; 383:2;
407:15, 16; 457:14
self-interest 443:17, 17;
444:12; 440:12
Semenik 293:23
send 303:2; 381:13
sense 295:4; 300:19;
341:9; 348:19; 364:21, 24;
384:8; 408:9; 424:9;
458:24; 459:24; 563:25;
564:9; 567:25
sensible 398:24; 468:23;
533:4
sensitive 535:15; 537:11
sentence 419:18, 19
sentences 286:10
separate 465:17; 466:25;
516:2; 563:17; 566:16;
576:2
separately 364:14;
461:17; 463:22; 465:20;
484:9; 485:2
separating 487:16
sequence 393:3; 445:24;
446:2
sequences 372:6
series 350:21; 482:10;
494:21; 497:17; 583:24;
589:17
serious 286:13; 322:5;

16; 436:17; 437:2; 445:11
serve 567:18
SESSION 411:2
set 287:16; 298:10;
299:14; 316:12; 331:16;
332:23, 24, 25; 335:16;
413:6; 416:16; 436:23;
500:5; 531:19; 589:19
sets 345:4; 352:11;
404:21; 441:18
setting 354:10, 410:5
settle 533:3
settled 445:13
several 431:6; 567:13
SG 463:10; 471:18, 22;
472:9; 474:16; 475:8, 21;
483:10, 18; 24; 485:11, 18;
486:15
SGTB 468:7, 12; 466:12;
467:14, 20, 25; 471:9, 23;
472:2; 475:8; 483:11, 15;
25; 484:18; 485:12, 19;
486:15
shared 340:7
Shield 287:14; 295:24;
296:2; 301:7; 304:15;
17; 305:5; 7, 14; 331:20;
350:19, 25; 351:2, 18;
487:13, 16; 489:2, 10;
16; 569:10
Shift 360:13
shifting 360:8
shorten 498:19
shortly 388:13; 389:5;
362:12
show 383:6; 488:11;
406:24; 415:3; 420:7;
432:14; 543:11; 559:3
showed 324:20
showing 315:19; 319:19;
394:2, 24; 355:18
shown 316:14; 325:6;
360:11, 19; 380:11, 19;
392:14; 393:21; 405:19;
453:7, 9; 489:3; 500:2;
503:24
shows 352:23; 353:6;
405:21; 407:8; 431:8, 16;
432:17, 22; 463:3; 466:18,
21
siblings 492:18
sides 408:8; 410:7
significance 314:18;
315:4, 7; 370:15, 18;
371:7, 15, 23; 372:11, 20;
373:3; 374:16; 466:15;
471:7; 472:10; 482:11;
483:6, 12, 16, 23; 485:3,
14; 486:8; 488:18; 563:18
significant 352:13;
373:11, 13, 15, 17, 22, 25;
374:2, 5, 7, 9, 11, 12, 14,
17, 17; 444:15; 447:10;
462:20; 464:15; 465:10;
466:18; 467:4, 9; 471:7;
15, 18, 22; 472:7, 13;
479:25; 484:10, 16;

485:15, 17, 23; 486:3, 7,
10, 17; 487:24; 488:10, 15,
22; 489:14; 560:23;
563:23; 564:8
significantly 314:25;
365:23; 436:19; 466:23;
467:18, 23; 484:18; 487:6
similar 352:7, 12; 449:15;
497:17
similarly 358:12; 368:10;
552:8
simple 404:24; 535:18,
19
simply 307:9; 349:14;
366:18; 372:14; 374:12;
376:11; 378:18; 382:8;
385:20; 388:12; 394:15;
409:19; 417:11; 457:5;
465:4, 16; 472:17; 490:21;
572:20
simultaneous 475:16
simultaneously 436:19,
24; 473:20; 474:4, 8;
475:13
Singer 357:25
single 343:2; 372:5;
408:9; 410:11; 413:19;
416:13; 423:6; 435:6;
466:17; 490:22; 581:25
sitting 503:22; 523:21;
561:18; 574:5; 575:5, 15;
581:14
situation 396:14
situations 396:20; 495:4
six 465:8, 13; 565:7
sixties 476:4
sizable 358:14
size 299:8
skeptical 543:7
skepticism 444:5
Skip 408:21
slightly 330:23; 405:6;
478:16; 479:2, 11; 486:22;
514:7
small 296:5; 308:21;
311:7; 312:9; 314:8, 16;
330:17; 360:15, 20, 22;
405:19; 406:5; 478:22;
514:2; 523:10; 546:16
smaller 315:2; 321:3;
489:21, 22
Smiling 292:13
Smith 590:15
smoke 326:13, 13; 327:2;
384:5; 418:16, 17; 419:8;
421:4; 424:16; 428:6, 8, 9;
429:17; 459:8; 476:23;
478:6; 492:9, 17, 19;
493:16, 22, 23; 502:4;
503:8, 9; 517:8; 519:12;
20; 521:24; 522:7; 524:14,
15; 541:23; 542:6
Smoked 292:13; 366:19;
375:25; 377:22; 429:19;
434:23; 437:4; 439:17;
455:11, 21; 456:15; 460:7,
11; 520:17

smoker 351:18; 384:2;
401:17; 423:15, 18; 519:2;
539:5; 573:10
smoker-only 463:15
smoker-related 574:14
smokers 295:24; 296:3;
297:24; 298:6, 9, 21;
299:16; 305:15; 308:8, 9,
10, 12, 15, 15; 311:3, 9,
12; 330:15; 331:5, 20;
339:11; 344:24; 350:20;
351:21; 363:4, 4, 5;
364:22; 365:8, 16, 20;
366:13; 367:2; 384:23;
385:4, 6, 6, 14, 21; 386:3;
396:3; 401:25; 425:18;
427:3, 10, 22; 429:4, 9, 10,
18; 430:2, 4, 5, 8, 9, 12;
432:3; 437:11; 451:23;
458:22; 459:13; 460:5, 10,
17; 461:4; 462:7, 8, 22;
463:16; 464:9; 484:21, 22,
24; 485:25; 486:11;
489:11; 490:3, 4, 6, 7, 11,
12; 491:2, 2; 507:8; 509:8,
11, 12, 16; 510:8, 9;
513:14, 15; 514:19; 516:7,
19, 22; 517:17; 520:7;
521:6, 10; 543:23; 544:10,
17, 21; 545:3, 6, 8, 14;
546:9, 13; 547:25; 549:18
smokes 519:6; 550:14,
16
smoking 290:2; 301:13;
322:5, 15, 16, 25; 326:14;
327:11, 16; 329:22;
331:15; 339:6, 9, 11, 12,
19, 22; 341:6; 344:18, 21;
345:2, 12; 377:15, 23;
383:20, 21, 25; 384:3, 6,
10, 24; 385:15, 18, 22;
386:4; 400:25; 401:9, 11,
18, 20; 402:17, 19, 25;
403:6, 8, 9, 10, 15, 18;
415:14, 23; 417:17;
419:12, 21; 420:10; 421:7,
7, 23; 424:3, 4, 17, 17;
425:20; 426:6, 8, 10, 15,
22; 430:24; 431:10, 17;
432:15, 16, 23, 25; 434:21;
435:9, 15, 19, 19, 25;
436:4, 6, 6, 7, 8, 17, 20, 20,
25; 437:7, 8, 9, 10; 438:4,
6, 17; 440:2, 4, 7, 12, 20,
23; 441:3, 4, 4, 9, 11, 11,
25; 442:2; 444:8, 17;
446:9; 450:10, 20; 451:3,
24; 455:12; 456:6; 459:6,
7, 17, 22, 23; 460:2, 6, 22;
461:2, 4; 469:13, 19, 20;
470:12, 14, 14; 474:23, 25;
475:4, 23, 25; 491:11, 12;
492:2; 493:2, 8, 18, 19, 21;
494:7, 14, 23, 25; 495:3,
11, 19; 496:4; 497:14, 18;
498:9, 11, 18, 21; 499:14,
22, 500:3; 501:13, 19, 21;
502:9, 10, 18, 25; 503:15;
504:21, 22; 505:5, 6, 14,
15; 506:2, 3, 15; 507:4, 10,

15; 508:25; 509:21, 23;
511:3, 5, 14, 17, 18; 512:3,
23; 520:16; 521:4, 17;
525:6, 7, 19; 526:3, 19, 25;
527:18, 24; 529:24; 530:6,
15, 23; 531:17; 532:21;
533:7, 11, 16; 534:4, 15;
535:7, 11, 20, 24; 536:13,
15; 537:19; 538:2, 6, 8,
540:2; 541:4, 19, 21;
542:10, 17; 543:3, 18, 19,
24; 544:11, 18; 545:2, 16;
546:10, 15; 548:20;
549:14, 15; 550:6, 13;
551:6, 10; 553:22; 560:16;
565:3; 568:2; 571:19;
576:24; 577:3; 583:25
smoking-related 572:4;
573:13
so-called 290:10; 463:9
social 341:17; 374:20,
24; 375:13, 17, 23; 376:4,
8, 10, 14, 16, 22, 24;
377:10, 14, 20; 378:6, 13;
379:8, 14, 19, 23; 380:2, 6,
9; 381:14, 15, 16; 399:4;
400:4, 19; 402:2, 11;
416:6; 419:21; 425:5;
435:16; 443:10; 454:21,
22; 456:25; 481:17; 492:5,
10, 13; 493:13; 494:4, 11,
17; 495:4, 18; 582:22;
586:12, 17; 588:4, 22, 24;
589:16; 590:12; 591:10
socially 380:22; 407:11
society 375:4; 448:22;
452:15, 24; 453:19
soldiering 567:10
sole 568:5
solid 386:13
somebody 303:3;
400:11; 402:12; 478:5, 24;
503:8; 519:5; 527:7, 23;
535:25; 550:14, 16;
552:21, 21; 553:22, 23;
554:4, 5; 555:20, 22
somehow 491:14;
542:15
someone 293:24; 341:3;
394:15; 512:14
sometime 548:3
sometimes 340:10;
342:25; 360:18; 367:12;
382:2; 414:6; 424:25, 25
somewhat 405:5;
458:17; 476:24; 478:7;
479:2; 485:6; 553:18;
556:5; 577:16; 584:10
soon 331:9
sorry 285:11; 287:21;
289:23; 293:7; 309:5;
318:16; 347:17; 359:9;
362:15; 364:3; 388:22;
395:7; 408:22; 412:7;
430:20; 454:12; 455:19;
470:7; 482:15; 483:21;
496:18; 498:23; 506:8;
510:2, 10; 512:10; 532:19;

545:20; 547:10; 548:10;
550:3; 551:7, 12; 571:13;
577:5, 7, 12; 582:5, 7;
583:11; 584:25; 586:21
sort 288:11; 297:14;
300:13; 338:24; 353:13;
363:6; 413:24; 414:11, 12;
416:5; 477:15; 504:3;
543:8; 544:22; 556:12
sorts 346:21; 498:14;
499:8
sounded 404:10
sounded 386:21
source 355:25; 356:3;
388:14, 19, 22; 387:11, 15;
20; 388:20; 398:2; 445:12;
16, 21; 22; 473:16; 474:2;
36
sources 436:23; 450:2;
4; 473:19; 474:3, 7
south 300:17; 304:13
Southern 500:23
space 478:2
speak 317:23; 438:23;
577:6; 550:17
speaking 349:19;
409:21; 410:2; 481:22;
499:16; 505:11; 555:7, 24;
574:22
special 315:7; 357:7;
391:11
specific 288:8; 295:7;
319:25; 320:15; 321:1;
338:24; 431:18; 576:20;
529:25; 534:6; 539:21;
560:19; 574:13; 583:2
specifically 393:10;
438:13; 488:17
specifics 388:14
specified 335:18
specifies 361:6
specify 550:11, 13;
554:20, 24
speculate 542:12; 543:2
spec 496:14; 585:7
spend 284:5
spent 283:13; 294:15;
295:19; 494:8; 534:22;
535:13
spoke 353:25; 398:18;
538:8
spoken 552:22; 553:2
speak 283:7; 295:17;
296:15; 297:3, 12; 298:10;
299:17; 300:7, 8, 11;
301:17; 327:14; 330:10;
14, 21, 25; 339:3, 5;
340:11, 16; 341:25;
343:18; 344:9; 346:22;
362:24; 363:23, 25; 364:6,
9; 365:9; 366:17; 368:20,
22; 372:3; 391:2, 3;
411:18; 412:12; 429:12;
449:21; 450:14; 508:6, 10;
17; 528:24; 537:8; 542:5;
544:7; 559:22; 573:17, 23
staff 571:14

stage 311:4, 5, 22
stand 547:10
standard 298:16; 302:11;
334:5, 22; 348:20; 413:6;
438:25; 454:16; 507:23;
535:13; 537:5; 586:5;
587:12
standards 354:15, 19;
425:9; 506:20
Stanford 500:24
Stanley 357:25
start 287:7; 319:2; 336:9;
345:24; 430:22; 433:8;
441:4; 459:23; 483:7;
489:20; 491:11; 493:22;
502:6, 9; 511:18; 517:7, 7;
522:7; 541:23; 555:18;
583:24
started 375:25; 377:16;
23; 476:23; 478:6; 497:6;
498:12; 502:3; 503:9;
538:17; 553:24; 568:19
starting 326:25; 522:23
starts 492:9, 17, 19;
493:15
state 321:18; 324:2;
493:19; 506:6; 512:10;
526:11; 550:3; 559:18;
568:13
stated 323:22; 401:13;
493:15
Statement 396:2, 5;
491:24; 405:2; 420:2;
444:11; 449:10, 13;
481:24; 504:20, 22;
506:24; 507:7, 16; 544:14;
545:10; 546:13; 587:6
statements 288:5, 17;
290:15; 291:12; 296:7;
321:19, 23; 322:3, 11, 24;
324:19, 20; 325:12;
326:11; 327:15; 331:15;
339:8, 22; 341:6; 346:7;
398:22; 402:2; 403:23;
405:24; 425:12; 437:7, 16;
438:15; 439:18; 440:6, 11;
441:7, 20; 442:3, 5, 8, 9,
23, 25; 443:6, 8; 444:23,
24; 447:4; 451:15, 16, 25;
25; 448:6, 13, 15, 16, 21;
449:2, 4, 6, 7, 11, 12, 16,
18; 450:4, 7, 9, 18, 19, 20;
451:10, 11, 22, 25; 452:3,
23, 25; 453:6, 12, 13;
459:22; 463:11; 469:12;
470:2, 5, 11, 16, 19;
472:19, 20, 22, 23, 25;
493:20, 23; 537:11;
567:14, 24; 568:4; 572:9,
18, 573:11
States 430:24; 445:13;
448:17; 450:8, 22; 529:17;
541:18; 550:7; 584:20
stating 321:18
statistic 480:12; 486:8
statistical 283:6; 301:19,
21; 306:4, 24; 328:2;
360:17; 370:15, 18, 19;

371:7, 15, 23; 372:11, 20;
373:2; 374:16; 464:22;
466:14; 467:3; 468:17, 25;
469:7; 471:7, 25; 472:10,
16, 21; 482:10; 483:6, 12,
16; 485:3, 13; 489:22;
563:18; 565:14
statistically 373:10, 13,
15, 16, 22, 25; 374:2, 4, 7,
8, 10, 12, 13; 380:21;
462:19; 464:14; 465:10;
466:18; 467:4, 9, 17, 22;
471:7, 14, 18, 21; 472:6,
12; 479:25; 483:23;
484:10, 15, 17; 485:15, 17,
23; 486:6, 9, 17; 487:6, 24;
488:10, 15; 489:14;
560:22; 563:23; 564:8
Statistics 293:6; 328:17;
349:8
status 540:24; 565:3
stay 521:5, 13
Stein 567:2, 6, 8; 570:16;
576:14; 592:2
step 313:4; 377:5, 6;
391:22
steps 341:15; 354:23;
373:24; 376:24; 377:3, 8;
382:14; 390:21; 391:5, 11,
17, 20, 21; 392:16; 399:10,
18; 407:20, 24; 408:23
still 282:13; 292:13;
307:12; 433:22; 474:2;
517:19; 520:10, 21; 524:5
stipulate 291:21
stipulated 466:8
stop 392:6; 410:15;
421:7; 492:23; 495:5;
497:11; 499:10; 545:20;
579:6, 24; 580:3, 3
stopped 402:17; 431:9,
17
story 574:20
stratification 489:9
stratified 368:6
stratify 487:14
stratifying 489:21; 490:3
Street 571:5, 9, 14; 572:3
stretching 390:10
Strike 433:7; 448:3;
512:15; 558:2; 560:20;
564:12
stroke 538:6; 539:6, 15
strong 300:22; 348:11;
349:11; 351:16; 446:20;
461:22; 469:4; 504:21;
505:5, 14; 506:2, 17, 18,
20, 23
stronger 348:25
strongly 405:5
structural 486:25
studied 404:22; 443:12
studies 316:12; 357:23;
359:5, 6, 8, 20, 22; 360:6,
11; 390:9, 11, 17; 403:7;
416:10, 13, 16, 20, 25;

417:5; 420:19; 432:14;
440:18, 19; 500:2, 4, 7, 21;
501:2, 6; 507:6; 524:20;
543:9; 556:4, 13; 578:20;
580:24
study 288:23; 330:21, 21;
340:16; 355:13; 358:2, 8,
11; 372:3; 377:7; 391:14;
399:4; 411:21, 24; 412:5,
6, 13; 420:23; 440:14;
451:14, 16, 21; 455:20;
471:14; 500:5, 8, 18;
524:9; 543:11; 564:13;
576:3; 589:8
study's 416:18
studying 351:23; 581:4
stuff 303:3
subgroup 301:14; 531:4
subgroups 300:21, 23;
305:2, 11
subject 335:5; 375:22;
376:8; 377:14, 19; 378:6,
13, 16; 422:17, 20; 570:22;
589:22
subjected 340:12;
371:14; 480:8
subjects 589:3, 12
submitted 293:21; 487:4
subpopulations 295:19;
300:9, 9; 304:3, 4, 6
Subscribed 592:13
subscriber 489:16;
528:16, 20; 572:6, 7;
573:11, 13; 575:6
subscribers 288:21;
301:7, 10; 304:16, 17, 21;
305:6, 8, 18; 331:21;
350:20; 351:8, 18, 21;
487:13, 16, 19; 488:18;
489:2; 569:10; 571:19;
573:21
subset 488:25
subsidiaries 576:9
subsidiary 339:15
substantial 324:21;
325:7, 10; 326:10; 460:5
substantially 316:15;
359:21; 489:23
substantive 360:9, 24;
563:18, 25; 564:9
substitute 507:13
successful 500:25
successfully 287:15
sufficient 468:21;
537:16, 18, 25
sufficiently 459:2
suggest 385:8; 397:8
suggesting 358:23;
469:5; 493:23; 503:4
suggestions 340:9
suggestive 457:10;
458:19
suggests 316:4; 357:20;
444:13; 496:3
summarized 394:15

supplement 329:24;
330:2, 3; 435:2
supplemental 350:23;
351:6, 13; 352:5
support 446:22; 544:8;
581:9, 15; 585:24; 586:4,
15
Suppose 336:10; 337:3;
346:13; 571:7
supposition 392:5
sure 283:16; 286:11;
287:21; 291:19; 307:4;
311:4, 23; 312:15; 313:2;
317:23, 25; 324:12;
325:25; 336:9; 348:3, 9;
364:3; 384:20; 397:11;
408:22; 421:25; 423:4;
428:14; 434:8; 438:18;
446:6, 14; 455:6; 456:11,
22; 476:9; 477:8; 482:13;
492:24; 496:15, 24;
499:11; 513:7; 525:21;
529:3, 9, 21; 544:3; 553:8;
559:16, 20; 564:14;
566:20; 570:16; 571:2;
572:15; 575:21
surface 457:19
Surgeon 301:3; 401:9,
19; 431:10; 436:18, 24;
441:6, 16, 22; 442:7, 10,
25; 443:3, 8, 24; 444:2, 4,
6, 16, 25; 446:10; 447:16,
25; 448:15, 17, 19, 19;
449:4, 8, 9, 13, 19; 450:7,
15, 22; 451:2, 19; 452:8,
10, 16, 25; 453:6, 12, 13,
18; 463:9, 10, 21; 464:2, 5;
465:19; 466:10; 467:5, 13,
25; 468:13; 470:2, 16;
471:2, 3, 8, 13; 472:5, 18,
22; 473:2, 7; 474:7, 21;
475:16; 476:3; 535:14;
559:25, 25
survey 283:7; 287:10, 12;
288:24; 289:16, 18, 25;
290:10; 293:4; 297:15, 20;
298:5; 299:6, 6, 9; 300:8;
301:8; 304:18, 19; 308:20;
310:4; 312:11, 21; 313:3,
4, 9, 11; 314:8, 14; 315:12,
20; 316:8, 21; 317:2, 10,
18; 318:14, 22; 319:10;
320:2, 19, 20; 327:14;
328:10, 13, 14; 330:10, 14,
16, 20; 332:18; 333:5, 12,
17, 19, 22; 334:9, 11, 13,
23; 335:8; 336:10, 11, 12,
13, 16; 337:4, 6, 10, 11,
20; 338:2, 7, 11, 16, 22,
24; 339:3, 5, 7, 19, 20, 21,
24; 340:10, 11, 14, 17, 19;
341:3, 4, 7, 8, 13, 25;
342:4, 7, 10, 23; 343:18;
344:9; 347:14, 24; 348:7,
11; 350:7, 14; 352:18;
353:3, 22; 354:5, 11, 14,
21; 355:23; 356:7, 12, 14,
15; 357:12; 358:3; 360:21;
361:3, 6, 13, 19, 22, 24;
362:4, 7, 10, 24; 363:8, 9,

12, 19, 25; 364:8; 366:22;
23; 367:2, 4, 11, 21, 22;
368:17, 21, 24; 369:4, 17;
370:10, 16; 371:4; 373:9;
374:20; 375:6, 14, 18;
376:23; 379:4, 9, 14, 20;
25; 380:7, 11; 381:3, 6, 8;
13; 382:16, 21, 25; 384:12;
16, 20, 25; 386:15, 17;
387:14, 24; 390:22;
391:2, 3, 18; 396:13, 15;
22; 397:16; 398:9; 399:7;
15, 24, 25; 400:3; 404:2, 7;
13, 18; 406:19, 20; 407:21;
409:11, 18; 412:16;
25; 414:9; 415:25, 25;
416:4; 417:6; 426:25;
427:2; 428:8; 429:7;
430:5; 434:4; 435:6, 15;
436:11; 437:21, 25; 450:3;
14, 18; 453:8, 10, 20;
458:11; 459:10; 460:10;
464:11; 477:3; 513:25;
528:24; 535:18; 544:7;
573:17; 590:18; 591:3, 5
Surveys 410:8, 14, 18;
311:14; 312:15; 313:3, 5;
6, 21; 314:3; 315:6, 23, 23;
316:14, 16; 318:5, 11;
319:6, 7, 20; 320:13;
330:22; 331:4, 19;
334:15, 25; 336:17, 18, 19;
340:5; 342:20; 352:23;
354:12; 355:11, 16;
358:13, 14; 360:2, 3, 5, 8;
12, 16, 24; 369:16; 370:11;
371:10; 372:3, 17, 18;
389:8, 12; 397:25; 398:12;
409:9, 25; 413:24; 415:2;
13, 14, 22; 416:24; 417:16
susceptible 376:22;
407:3; 457:5
suspect 386:10
suspicion 446:22, 23
sworn 287:3; 402:13
synergy 474:8
synonym 401:5
synonymy 511:7
system 302:2; 368:18
systematic 335:20;
371:3; 418:24; 450:24
systematically 356:12;
360:13

table 400:12; 526:10;
530:17, 18; 550:19;
551:21, 22, 24; 552:17
tail 518:21
tailored 473:22
talk 303:8; 310:12;
312:18; 313:12; 334:24;
335:2; 338:21; 373:12;
425:13; 427:6, 7; 450:8;
12; 455:9; 493:17; 507:23;
508:17; 576:19

talked 290:8; 355:14;
357:18; 358:24; 367:6;
395:21; 399:19; 412:4;
424:19; 519:18; 523:3
talking 304:4; 310:5;
327:18; 341:25; 348:19;
354:24; 357:20; 360:9;
390:25; 399:17; 420:5;
425:23; 448:16, 18, 19;
482:17; 487:21; 488:5, 11;
492:10; 493:2, 13; 497:6;
513:22; 528:22, 23;
529:16; 544:6; 547:24;
557:19; 568:24, 25; 571:3
talks 450:7
tape 356:24; 357:4;
442:12, 15, 19, 22; 545:23;
546:4; 599:8
tautology 532:11
TB 471:18; 472:2, 9;
474:16; 475:9; 483:15, 25;
485:19
teachers 492:21; 493:7;
7, 17, 20, 25
technical 364:24
technique 388:15, 17;
416:10
techniques 378:12;
383:5; 416:2
teeny 524:5
telephone 313:20; 313:6;
330:21, 21; 331:19; 357:8;
358:4; 362:7;
363:13, 19, 24; 364:7;
368:17, 21; 370:18;
373:9; 376:23; 379:3, 14;
20; 381:3; 382:11; 390:22;
391:3; 404:13; 426:25;
457:25
telephoning 361:15
telling 565:6; 582:15
tells 310:25
tend 371:19; 387:4;
390:4, 15; 402:12
tense 505:10
term 298:24; 323:8;
326:7, 18; 333:1; 335:8;
342:24; 360:25; 370:24;
365:2; 370:16; 373:14;
374:19; 423:3; 424:7;
443:2; 454:9; 459:11;
472:17; 477:10; 486:2;
503:2; 533:3; 557:4, 6, 11;
13; 563:18, 19; 564:15
terminology 324:11, 11;
359:4
terms 295:19; 298:17;
300:24, 25; 334:18, 20;
351:19; 360:7; 382:8;
384:25; 388:13; 392:19;
394:17; 398:24; 423:5;
425:2; 426:11; 472:10;
477:17, 25; 478:2; 484:11;
488:25; 489:10; 499:13;
15; 511:10; 512:25; 513:2;
530:3; 556:4, 7, 14;
578:21; 580:14; 587:13
terribly 543:9

terrific 376:9
territory 401:22
test 371:15; 373:5; 374:3;
9, 11; 380:4; 435:4; 466:2;
483:19; 488:18; 489:7
tested 380:5
testified 282:4; 322:23;
411:5; 483:15; 521:22
testifies 302:21; 307:16
testify 306:10; 308:2, 3;
329:11, 16; 331:13;
332:14; 446:25; 447:5;
483:17, 18; 521:22
testifying 422:10
testimony 289:7, 14;
299:25; 322:22; 324:17;
325:10; 364:6; 389:7;
402:15; 417:15; 422:16;
17; 466:3; 575:13, 16
testing 378:12, 16;
464:13; 469:17
tests 321:12; 373:25;
374:15; 378:20; 379:18;
23; 457:4
Texas 500:24
textbook 584:22; 585:11;
24; 586:8, 12, 17, 20;
589:23; 590:18, 20;
591:10
textbooks 453:20; 585:2;
590:21
Thanks 563:16
theoretical 300:22;
349:11; 351:17; 383:18
theories 495:7
theory 382:6, 7; 435:17;
469:4
therefore 299:10, 16;
311:9; 351:25; 352:14;
356:5; 363:10; 384:22;
400:15; 403:22; 408:13;
417:3; 430:3; 460:3;
464:19; 468:21; 469:3;
473:7; 503:25; 506:21;
531:3; 534:24; 559:2
thereof 295:12
thick 566:18
thinking 283:8; 331:17;
384:21; 392:20; 412:2;
413:18; 426:15; 437:22;
457:22; 541:24
third 346:13; 380:20;
405:11; 517:12; 527:3
Thirdly 290:12
thoroughly 416:3
though 283:3; 432:11;
520:19, 24; 586:13
thought 346:15; 347:20;
372:9; 376:13, 15, 18;
382:12; 388:25; 428:22;
435:24; 473:14; 551:12
thousand 516:18, 22;
517:9, 10; 520:24, 25
three 286:11; 312:20;
381:2, 5; 405:18; 453:16;
17, 18, 18, 19, 20, 22, 22,

23; 461:10; 463:10;
466:15, 15; 472:18, 22, 23;
25; 473:4; 521:10; 523:25;
529:8; 550:16; 565:7;
580:18; 582:3, 4, 9, 18, 19;
583:3; 584:24; 587:17;
589:19
throat 535:3
throughout 428:7
thrown 395:20
tied 316:5
times 283:25; 325:2;
367:17, 19; 368:11;
454:17; 464:10; 523:23;
25; 553:23; 554:4; 555:21
tiny 524:5
title 585:5, 13; 590:23
titles 292:15; 968:20;
590:25
tobacco 287:20; 288:7;
18; 290:16; 291:11; 292:4;
9, 10, 14; 296:7; 301:3;
321:19, 23; 322:2, 4, 10,
23; 324:19; 325:12;
327:15; 339:9; 434:18;
435:12; 436:18; 437:2, 6,
15; 438:5; 439:18, 25;
440:5, 12; 441:14, 19;
442:4, 8, 24; 443:7; 444:9,
11, 23; 445:6, 10, 16, 18;
446:8, 15; 447:24; 448:6;
14; 449:3, 6, 11; 450:16;
451:10, 23; 452:3; 455:16,
22; 459:22; 463:11, 12;
466:11; 467:5, 20; 469:12;
18; 470:4, 12; 471:3;
474:8, 24; 475:3, 6, 15, 23;
542:16, 21; 543:13;
559:25; 560:2; 567:14, 24;
568:4, 18; 572:18; 575:19,
20; 576:5
tobacco's 474:23
tobaccos 445:15
today 284:18; 285:14;
302:7, 9; 307:14; 343:8;
16; 344:4; 345:29; 388:9;
398:19; 409:7; 444:21, 22;
465:3; 467:2, 10, 10, 11;
12; 483:15; 504:10; 515:4;
523:21; 533:2; 542:9;
543:3; 549:2, 6; 557:16;
566:2, 21; 567:12; 574:5;
575:5, 15
together 352:5; 416:13;
441:17; 461:16, 24;
463:13; 464:21; 468:11;
475:18; 580:22; 581:7
told 345:25; 422:9;
429:25; 430:9; 502:14;
548:11; 555:13; 589:5;
591:9
tone 409:21
tonight 515:9
took 389:20; 390:3, 14;
408:14; 416:19; 437:20;
449:13; 544:15; 557:24
tool 561:12, 16, 17
topic 504:16

topics 347:8; 414:17;
416:12
toward 353:7; 355:9;
406:13; 513:24
towards 493:2
track 541:5
Trade 287:11; 289:17;
482:20
tradition 382:7
traditional 412:25
training 419:3
transcript 285:9, 22;
286:7; 408:14; 410:13
transcription 286:12, 15,
17
transformed 346:6;
557:24
transforming 336:5
translation 292:23
treat 556:14
treated 477:5; 553:25
trends 416:14, 15
trial 290:20; 302:19;
329:12; 331:13; 332:14;
549:8; 562:12; 563:2;
566:24; 567:20; 574:8
triangulation 298:24
trick 577:14
tried 310:4; 424:12;
457:17; 503:3, 12
tripped 522:10
trouble 312:25; 336:15;
18; 384:21; 387:25;
388:14; 393:17; 470:7;
491:20; 501:23; 503:2;
505:9; 534:18; 589:14
true 405:10, 23; 440:23;
443:19; 444:21, 22; 459:4;
471:16; 472:8, 15; 474:14;
527:25; 530:21, 21; 540:8;
545:10; 546:20, 21; 547:3
true/false 405:8
truly 365:21
truth 540:10
try 298:25; 314:4; 337:25;
345:15; 346:10; 473:14
trying 367:24; 389:16;
395:6; 447:22; 479:6;
525:6, 19; 561:3; 565:23;
579:7; 586:21
tune 482:18
turn 383:8; 403:25;
422:19; 434:14; 470:21;
476:16; 482:3; 517:13;
526:14; 540:5; 543:25;
566:25
turned 282:25; 285:3;
291:10; 311:8; 376:14, 16,
19
turns 443:23; 460:15;
462:17; 548:3; 554:17;
556:11
twice 284:2; 514:18
two 286:10; 293:18, 21;
300:20, 23; 301:15; 321:2;

330:17; 331:10; 338:6, 14,
16, 17; 339:17; 344:5, 14,
16; 345:23; 346:2, 4;
347:7; 348:20, 22; 349:9,
11, 17; 352:6, 7, 11;
357:22; 358:17, 24;
359:12; 367:3, 4; 370:8,
19, 22; 371:19; 373:15,
374:24; 381:17; 382:9;
384:3; 400:7; 423:24;
435:23; 436:23; 446:16;
448:7; 451:24; 453:11;
455:19; 461:10, 14, 16, 17,
20, 23; 462:6, 7, 11;
463:13; 464:16, 19, 21;
465:19; 466:22, 24;
468:10, 11, 15; 469:5;
473:19; 474:3, 6, 18;
475:13; 479:10; 485:16;
500:17; 512:6; 513:5, 12,
14; 514:4, 5; 516:2, 15;
517:19; 521:11; 522:15;
523:13; 557:10; 581:24;
590:8
two-page 515:22
type 354:22; 405:7;
560:16; 582:23; 589:7, 9,
11, 20
types 336:22; 337:23, 25;
353:8, 11, 12; 355:9;
389:19; 405:18; 555:9;
583:16; 584:20
typically 297:15; 320:18;
335:8; 337:22; 342:19;
350:13; 351:19; 384:17;
398:16; 405:13; 457:25;
497:24; 501:24

U
U.S. 300:5; 361:16;
445:14; 507:8
ulterior 343:20
ultimately 309:4; 310:21
unable 308:14; 412:11
unbalanced 413:21
uncomfortable 546:22
uncompromised 316:2
under 282:13; 302:3, 5;
376:5; 382:8, 13; 391:23,
23; 392:5, 7; 406:9, 23;
408:2; 435:12; 495:21, 22;
535:16; 537:10; 562:17;
563:3, 6
underestimate 425:19;
430:13; 433:18, 24; 509:8,
16; 518:17; 520:12, 21, 23;
544:10; 545:15, 17, 19;
546:9, 14; 549:22, 24, 25,
551:2; 552:7
underestimated 432:3,
8, 25; 551:13
underestimates 550:8
underrepresent 360:13
understands 405:16
understate 480:13
understood 325:23;

369:13; 417:9; 545:17
undertaken 575:2
undesirable 434:22;
441:3; 507:15; 523:15
unfair 470:23
unfolded 475:3
unfortunately 462:13
unfriendly 406:4
unhappiness 461:2;
579:6
unhappy 345:12; 456:7,
8, 17, 18; 457:22; 458:5, 5,
13, 15; 476:25, 25; 478:25,
25; 479:2, 2, 11
uniquely 389:21, 24;
399:8
unit 557:10
United 430:24; 448:17;
450:6; 529:16; 541:18;
550:19
universally 506:19
University 358:3; 500:6,
22
unknown 552:16
unlikely 343:11; 444:12
unlikely 417:8; 458:4;
464:13; 484:23
unpleasant 382:9
unpleasantness 382:11
unreadable 289:25
unrelated 315:20; 320:16
unrepresentative
316:15
up 310:18; 312:18;
326:13; 355:21; 359:4;
365:13; 383:11;
397:13; 404:20; 405:22;
421:6; 423:17; 438:4;
463:13; 466:20; 487:3;
498:15; 521:17; 522:10,
13; 532:15; 551:17;
557:20; 568:12, 15, 15;
579:9; 581:8; 582:20;
584:16
up-to-date 415:25
upon 305:23; 317:2;
323:4, 20, 21; 325:11, 15;
326:13; 343:14, 16;
345:22; 373:5; 378:19;
419:6; 426:4; 436:4;
506:19, 20; 526:3; 537:5;
546:19
use 292:9; 298:2, 22, 24,
25; 302:7; 317:12; 326:17,
20; 333:17, 18; 335:9;
336:23; 337:25; 338:8;
349:12; 365:2; 368:10;
372:17; 385:17, 19;
392:23; 443:4; 478:9;
479:14, 16; 480:12, 22;
481:14, 15; 490:19;
491:18; 511:9; 514:12;
523:18; 531:17; 538:10;
567:19, 21; 588:15
used 289:5, 13; 290:19;
305:19; 312:4; 326:6, 18;
329:25; 330:19; 333:9;

336:21; 337:4; 342:11, 25;
345:6; 352:18; 361:2;
368:21, 23; 370:16, 20, 21;
371:7; 375:17; 392:13;
393:10; 397:22, 23;
399:13; 412:24; 413:6;
414:23; 415:7; 416:23;
445:2; 452:17; 459:12;
472:17; 477:10; 478:4;
479:23; 480:3, 4, 6, 16;
490:23; 491:21; 513:5, 17;
546:23; 557:15; 569:8;
574:11; 588:6; 589:20
useful 303:4; 330:6;
362:4; 367:13, 18, 20, 22,
25
uses 355:2; 358:2; 392:3;
589:23
using 299:14; 324:10;
330:10; 335:25; 343:19;
350:8; 369:24; 372:17;
402:23; 429:4; 454:8;
459:11, 14; 480:20; 481:2;
504:2; 511:6; 528:12;
529:10; 531:18; 535:13

V

vacuum 525:16
valid 332:20; 333:3, 4, 14;
399:15; 418:10
validity 299:4; 315:11,
21; 316:5, 8, 11, 21, 25;
319:9, 16; 333:8, 15, 16,
17; 348:15, 18; 349:20, 21,
22; 350:13; 351:3, 4, 10,
14; 352:10, 13, 14; 356:6;
398:8, 18; 444:13; 469:24;
478:23
validity 349:3
valuable 416:24; 468:9
value 411:23; 481:25;
487:7; 488:20; 559:13;
561:19
values 346:11; 540:8;
578:23; 579:2, 22; 584:13,
16
variable 368:10; 374:10;
435:8; 436:11; 461:18, 20;
462:12; 480:10; 553:10,
16; 556:24; 557:2, 5, 8, 9,
14, 18, 19, 21; 576:19
variables 295:20;
301:11; 304:22; 320:16;
351:19; 370:19, 22; 371:9,
19; 372:8; 373:6, 8, 15;
412:22; 414:18; 477:4;
497:10; 553:9; 557:25
variance 466:17, 18
varies 535:23
variety 346:17; 378:12;
494:24; 580:25; 581:11
various 295:18; 300:8;
304:3; 305:2; 350:22;
367:25; 382:14; 475:18;
482:11; 535:17; 543:22;
554:25; 567:14

vary 461:23; 519:18
varying 424:24
vast 425:17; 509:7, 15;
531:11; 544:9, 16; 545:5,
13; 546:8, 12
verbal 578:23; 587:2
verbally 392:19
verify 335:7
versa 338:21
versions 372:5
versus 315:23; 370:25;
372:14; 406:22; 449:12;
451:10; 485:18; 523:17
vice 338:20
VIDEOGRAPHER
303:18, 21; 356:23; 357:3;
410:17; 442:14, 18;
476:10, 13; 482:23; 483:2;
515:17, 20; 545:22; 546:3;
592:5
videotaped 356:25;
357:5; 442:16, 19; 545:24;
546:5; 592:7
view 319:8, 12, 14; 370:9;
402:9; 416:6; 452:9;
468:11; 513:9; 516:25;
517:3, 6, 23; 518:7, 17, 18;
520:12, 14; 521:23; 525:8;
543:8
viewed 446:4; 464:16
views 493:8
violate 456:24
virtually 507:8; 519:4, 5
virtue 311:2
Viscusi 285:7, 15, 17, 23;
289:6, 13; 290:2, 19;
415:21; 417:18; 427:19;
552:18, 19
Viscusi's 546:22;
548:23, 24; 550:12
Visser 590:10
visual 289:5, 13, 15;
392:13; 394:17
visually 394:10
vitae 500:13, 14; 582:19,
20
vivid 295:4
vividly 445:9; 574:10
voice 409:21; 474:22, 23
volume 590:12
vote 371:12, 14, 22

W

wait 470:8
waiting 427:13
walked 468:12
walking 482:16
Wall 571:5, 9, 14; 572:3
wants 468:17; 538:11
warnings 441:7
Wars 292:14
Washington 325:3

way 286:23; 296:15;
297:4; 314:5; 315:8;
320:18; 326:6, 18, 19;
334:18; 335:9, 12, 20;
338:15, 18; 341:7; 344:11,
12; 352:7; 353:11; 358:21;
363:6; 366:17; 371:22, 25;
376:2; 384:21; 388:16;
389:2, 23; 393:18; 399:21;
402:22; 409:21; 410:8;
412:13, 19; 413:3, 10;
414:19; 416:25; 424:12;
426:23; 427:5, 16; 435:4;
443:22; 448:10; 457:7, 24;
461:21; 469:22, 24;
470:15; 474:19, 20;
475:18; 480:19, 20, 24;
482:17, 20; 487:14;
494:13; 499:2; 503:4, 20;
504:2, 14; 513:23; 518:16;
523:10; 532:18; 533:17;
537:6; 538:13, 15; 542:19;
545:17; 546:25; 548:25;
550:25; 551:21; 552:14,
17; 558:24; 560:15; 562:4;
574:2; 577:8; 580:7, 22;
581:8
ways 300:12; 313:9;
332:23; 335:7, 13; 336:11;
344:14; 348:21; 353:4, 14;
356:14; 366:4; 371:6;
373:4; 375:3, 13; 381:17;
388:9, 11, 18; 398:24;
402:5; 408:10; 409:25;
413:9; 461:14; 475:8;
494:24; 581:24
weaknesses 411:18, 20;
412:12, 15, 19
week 331:10
weeks 331:11
Weighted 559:10
weighting 330:10; 331:2;
360:17, 18
well-established
342:18; 383:5
weren't 455:3
west 300:17; 304:13
What's 488:17
whatsoever 460:22;
480:16
whenever 338:21
whereas 443:22; 513:17
whereby 335:20; 340:6;
403:23
whole 297:12, 19;
323:20; 399:23; 529:10,
13
whose 293:23, 25;
454:24; 496:12
widely 325:3; 327:8;
445:17; 464:7; 468:13
widespread 327:6
WILLIAMS 303:6, 13;
466:6; 482:4, 6, 7, 20;
483:4; 486:4; 488:7;
508:4; 510:18; 512:15;
515:3, 6, 13; 528:21;
529:2, 18; 537:22; 538:9;

14, 17, 22; 546:6; 558:2;
559:5, 20; 560:20; 562:22;
563:5; 564:12; 565:17;
566:13, 17, 21; 576:15;
591:12
win 338:13
wish 575:25
wished 361:12; 553:24
withdraw 545:11
within 295:19; 331:10;
333:19; 408:8
without 315:15; 340:22;
378:14; 381:22; 423:22;
457:4, 22; 503:23; 532:21
witness 282:3; 422:7;
515:8; 562:21, 23; 566:24
word 305:19; 312:4;
326:5; 335:8; 352:18;
397:22; 402:23; 458:5;
9, 10; 487:20; 491:20;
507:18; 511:18; 544:19
worded 353:10; 413:7, 9,
10, 16
wording 376:12; 414:5;
456:10
wordings 355:25
words 315:22; 317:10;
324:9; 348:22; 353:25;
356:10; 360:22; 392:14;
394:16; 395:23; 400:10;
401:8; 405:25; 426:8;
428:22; 435:10; 443:4;
452:13; 456:12; 458:11;
464:16; 465:14; 473:24;
474:11; 475:14; 477:21;
480:22; 488:16; 501:24;
513:13; 514:18; 523:3, 9;
524:12; 533:22; 536:7;
537:7; 544:13; 550:14;
552:15; 556:8, 8; 567:19;
572:5; 579:15, 20; 581:10
work 282:19; 282; 284:17;
293:16; 318:19; 329:11;
15, 18; 415:13; 417:9, 10;
420:22; 421:15; 491:22;
496:12; 497:7; 525:25;
531:25; 562:13; 587:12;
588:18
worked 420:14, 23;
424:13; 500:5
working 283:13; 286:23;
414:23
works 413:16
world 332:13; 453:24;
469:11, 11; 470:3; 472:24;
473:6
worried 444:1
worth 358:3
worthy 349:16
writing 419:18, 20, 24;
580:24
writings 547:9
written 286:20; 295:17;
305:4; 328:14; 329:3, 6;
335:4; 350:17; 361:25;
415:17; 419:10, 19, 25;
481:5, 8, 11; 487:3;

496:10; 581:8; 586:8, 19;
24; 587:6, 24; 588:14;
589:22; 590:20, 21
wrong 286:9; 318:15;
359:9; 389:2; 450:6;
456:21, 22, 23; 468:6;
480:15, 20, 23; 558:16
wrote 420:5; 579:15, 20;
586:20; 589:23
WSJ 571:7

X

Xeroxed 307:8

Y

year 306:6; 343:10, 12;
344:5; 346:2; 428:3;
445:5; 446:16; 447:9, 17;
448:7; 481:13; 550:15;
571:21; 588:3
years 283:19; 286:7, 19;
292:9; 358:3; 359:25;
390:8, 15; 416:11; 429:20;
430:25; 440:21; 469:18;
470:13; 471:15; 543:18;
550:16, 19; 567:25; 588:6;
589:17
yes/no 408:9; 413:21
Yesterday 284:1, 6, 8;
294:20, 25; 306:18;
307:14; 409:14; 569:22;
570:4, 18, 21, 24; 571:12
yield 345:8; 348:21;
356:15; 481:12; 549:6;
587:3
yielded 350:21; 568:19
yielding 535:20
yields 468:25; 471:14
York 325:2
young 406:23; 441:23;
535:20
younger 406:20, 22

Z

zero 349:13; 453:15;
556:9, 17, 18; 565:6

win - zero (22)

Min-U-Script®

SPHERION DEPOSITION SERVICES

52434 5586

produced by RJRTC

in

HUMPHREY

BLUE CROSS & BLUE SHIELD-V-PHILIP MORRIS

Witness: JON A. KROSNICK

Date: MARCH 12, 2001

Exhibit Numbers: 1 -3

52434 5587

Respondents who have according to Krosnick a relative risk of 2.0

Respondent Number	WEIGHT	Rel Risk New - Zeros Made Into Ones in Denom	# of Lung Cancers Per 1000 Non-Smokers	# of Lung Cancers Per 1000 Smokers
11965	0.58253	2	0	2
9415	1.16506	2	1	2
30722	0.58253	2	1	2
52119	0.58253	2	1	2
43808	1.16506	2	3	6
2115	1.16506	2	5	10
9000	1.16506	2	5	10
9794	1.74759	2	5	10
15070	1.16506	2	5	10
16494	1.16506	2	5	10
29443	0.58253	2	5	10
33960	1.16506	2	5	10
4480	1.16506	2	10	20
5290	1.16506	2	10	20
11422	1.16506	2	10	20
12819	1.74759	2	10	20
13635	0.14563	2	10	20
13408	0.58253	2	10	20
14510	0.58253	2	10	20
14882	0.58253	2	10	20
17181	0.58253	2	10	20
27952	0.58253	2	10	20
27958	0.58253	2	10	20
31998	1.16506	2	10	20
32127	1.16506	2	10	20
37123	0.29126	2	10	20
41169	0.58253	2	10	20
48838	0.58253	2	10	20
10313	0.58253	2	20	40
28237	1.16506	2	20	40
25742	1.16506	2	20	40
43857	0.29126	2	20	40
46461	1.16506	2	20	40
4883	1.16506	2	25	50
11854	0.29126	2	25	50
28962	0.19418	2	25	50
49694	0.58253	2	25	50
28439	1.16506	2	30	60
29840	1.16506	2	30	60
40773	1.74759	2	30	60
4392	1.16506	2	50	100
5304	0.58253	2	50	100
7175	1.74759	2	50	100
11191	0.58253	2	50	100
12167	0.58253	2	50	100
12564	0.58253	2	50	100
12955	0.58253	2	50	100
14741	0.58253	2	50	100
17261	1.16506	2	50	100
21131	0.58253	2	50	100
21458	0.58253	2	50	100
23900	1.16506	2	50	100
24595	0.38835	2	50	100
24700	1.74759	2	50	100
29740	0.58253	2	50	100
36747	0.43690	2	50	100
53381	1.16506	2	50	100
10486	1.16506	2	60	120
32828	1.16506	2	70	140
13531	0.58253	2	75	150
505427	0.58253	2	75	150



52434 5588

Respondents who have according to Kroshnick a relative risk of 2.0

Respondent Number	WEIGHT	Rel Risk New - Zeros Made Into Ones in Denom	# of Lung Cancers Per 1000 Non-Smokers	# of Lung Cancers Per 1000 Smokers
938	0.58253	2	100	200
1593	1.74759	2	100	200
2181	1.16506	2	100	200
3995	1.16506	2	100	200
4466	1.16506	2	100	200
5637	1.16506	2	100	200
6219	1.16506	2	100	200
7004	1.16506	2	100	200
7067	1.74759	2	100	200
7084	1.16506	2	100	200
7507	0.58253	2	100	200
7683	1.16506	2	100	200
7981	1.16506	2	100	200
7983	0.58253	2	100	200
8139	0.38835	2	100	200
10027	1.16506	2	100	200
11589	0.58253	2	100	200
12680	0.38835	2	100	200
13209	1.16506	2	100	200
13329	0.29126	2	100	200
13660	1.74759	2	100	200
14549	1.16506	2	100	200
15795	0.58253	2	100	200
19157	0.58253	2	100	200
19944	0.58253	2	100	200
20100	0.58253	2	100	200
22687	1.74759	2	100	200
23435	1.16506	2	100	200
27951	0.58253	2	100	200
28950	0.58253	2	100	200
29274	1.16506	2	100	200
33236	1.16506	2	100	200
38067	1.16506	2	100	200
44783	0.58253	2	100	200
45860	0.87379	2	100	200
48703	0.58253	2	100	200
51552	0.29126	2	100	200
51588	1.16506	2	100	200
53704	1.16506	2	100	200
54577	1.16506	2	100	200
591596	0.58253	2	100	200
501881	0.58253	2	100	200
8757	1.16506	2	150	300
14100	0.58253	2	150	300
4224	0.58253	2	150	300
28873	1.16506	2	150	300
44481	1.16506	2	150	300
945	1.16506	2	200	400
1240	1.16506	2	200	400
3462	0.87379	2	200	400
4279	0.58253	2	200	400
5728	1.16506	2	200	400
6132	0.58253	2	200	400
7555	1.16506	2	200	400
7950	1.16506	2	200	400
8540	1.16506	2	200	400
8700	1.16506	2	200	400
13085	1.74759	2	200	400
16256	0.29126	2	200	400
16615	1.16506	2	200	400
22346	0.58253	2	200	400

52434 5589

Respondents who have according to Krosnick a relative risk of 2.0

Respondent Number	WEIGHT	Rel Risk New - Zeros Made Into Ones in Denom	# of Lung Cancers Per 1000 Non-Smokers	# of Lung Cancers Per 1000 Smokers
30064	0.38835	2	200	400
38967	0.58253	2	200	400
41402	0.58253	2	200	400
48607	0.29126	2	200	400
52190	1.16506	2	200	400
1851	1.16506	2	250	500
2804	1.16506	2	250	500
3911	0.87379	2	250	500
5235	1.16506	2	250	500
6873	1.74759	2	250	500
10266	1.74759	2	250	500
14863	1.16506	2	250	500
17352	1.16506	2	250	500
20664	1.16506	2	250	500
20762	1.16506	2	250	500
21592	1.16506	2	250	500
23740	0.58253	2	250	500
23771	0.58253	2	250	500
24787	1.16506	2	250	500
27850	1.16506	2	250	500
28415	0.58253	2	250	500
28552	0.58253	2	250	500
28782	1.16506	2	250	500
29472	0.58253	2	250	500
31192	0.58253	2	250	500
31292	0.58253	2	250	500
33521	1.16506	2	250	500
34249	1.16506	2	250	500
40081	1.16506	2	250	500
40704	1.16506	2	250	500
44423	1.16506	2	250	500
45375	2.91265	2	250	500
48954	1.16506	2	250	500
48996	1.16506	2	250	500
52025	1.74759	2	250	500
54302	1.16506	2	250	500
54940	2.33012	2	250	500
582961	0.58253	2	250	500
6255	1.16506	2	300	600
5932	1.16506	2	300	600
6853	0.58253	2	300	600
12863	0.58253	2	300	600
30118	1.16506	2	300	600
4590	1.16506	2	400	800
464	2.33012	2	500	1000
2342	0.29126	2	500	1000
6298	0.58253	2	500	1000
8144	0.58253	2	500	1000
8361	1.16506	2	500	1000
10848	0.58253	2	500	1000
12181	0.58253	2	500	1000
17401	0.58253	2	500	1000
17646	0.58253	2	500	1000
18847	0.58253	2	500	1000
19328	0.58253	2	500	1000
19521	0.58253	2	500	1000
23889	1.16506	2	500	1000
27285	1.16506	2	500	1000
36912	0.58253	2	500	1000
52523	1.16506	2	500	1000
53799	1.16506	2	500	1000

52434 5590

MEDIANS Individual Measures of MTQ
WEIGHTED

Exposure Group	Frequency	Median of REGRET	Median of UHAPPY	Median of LIKESTOP	Median of TRYQUIT	Median of MTQ	Average of MTQ
CONTROL	477	2.00	5.00	2.00	3.00	3.00	3.15
SG	509	2.00	5.00	2.00	3.00	3.00	3.06
TS	524	2.00	5.00	2.00	3.00	3.00	3.06
SGTS	490	2.00	5.00	2.00	3.00	3.00	2.91

produced by RJRTC
in
HUMPHREY



52434 5591

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

BLUE CROSS AND BLUE SHIELD OF NEW
JERSEY, INC., et al.

Plaintiffs,

98 Civ. 3287 (JBW)

- against -

PHILIP MORRIS, INCORPORATED, et al.

Defendants.

REPORT

of

Dr. Jon A. Kroznick
Department of Psychology
The Ohio State University
108 Lazenby Hall
1885 Neil Avenue
Columbus, Ohio 43210
Dated: January 22, 2001

JAN 22 2001 11:40 PM FR DEWEY BALLANTINE LLP 59 6033 TO 902915#659497#12 P.03

52434 5592

1. I am a Professor of Psychology and Political Science at The Ohio State University in Columbus, Ohio.
2. I have written this report to offer opinions regarding the impact of the conduct of the defendants in this action on the knowledge and smoking behavior of Americans, and, in particular, subscribers of Blue Cross and/or Blue Shield plans.
3. A recent full curriculum vitae is attached to this declaration as Appendix A. In paragraphs 4-10 below, I summarize some important aspects of my qualifications and background.
4. I received an A.B. degree in psychology from Harvard University and M.A. and Ph.D. degrees in social psychology from the University of Michigan. As a part of my undergraduate and graduate studies, I received extensive training in social psychology, survey and experimental research techniques, and statistical data analysis, and political science.

INTRODUCTION AND BACKGROUND OF OPINION

98 Civ. 3287 (JBW)

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

BLUE CROSS AND BLUE SHIELD OF NEW
JERSEY, INC., et al.,

Plaintiffs,

- against -

PHILIP MORRIS, INCORPORATED, et al.,

Defendants.

5. My undergraduate honors thesis was an exploration of the causes of cigarette smoking among pre-adolescents and adolescents and was published in the journal Developmental Psychology, a top-ranked journal in developmental psychology. This research was possible because during my undergraduate studies and during a year afterward, I was a full-time researcher working on a field research project based at the Harvard University School of Public Health on cigarette smoking, which yielded an additional publication of which I am an author.

6. Since 1986, I have been a member of the faculties in Psychology and Political Science at The Ohio State University. My position there involves teaching classroom courses for undergraduates and graduate students, as well as one-on-one training of graduate students in research methods.

7. My research has been recognized by the Erik H. Erikson Early Career Award and election as a Fellow by the Center for Advanced Study in the Behavioral Sciences, the American Psychological Association, the American Psychological Society, and the Society for Personality and Social Psychology.

8. I have authored or co-authored three published books, over 65 articles published in journals or edited books, over 120 research presentations at professional conferences, and have given over 45 invited addresses at other universities. Eleven additional journal articles and one book are currently in the process of being published. My journal articles have appeared in top-ranked journals in social psychology (Journal of Personality and Social Psychology, Journal of Experimental Social Psychology), political science (American Political Science Review, American Journal of Political Science).

survey research methods (Public Opinion Quarterly), and sociology (American Sociological Review, American Journal of Sociology).

9. Much of my research has focused on survey research methods, including how best to measure opinions and behavior through surveys, and almost all of my research has involved collection and analysis of survey data.

10. There are several other indicators of my competence as an expert on survey research methods. First, I serve on the editorial board of the most prestigious journals in social psychology (Journal of Personality and Social Psychology) and in survey research methods (Public Opinion Quarterly). Second, I regularly serve as a reviewer for other journals, publishers, and professional organizations. Third, I have received 33 grants to support my research. Fourth, I currently serve on the Boards of Overseers of the National Election Study and the General Social Surveys, the nation's leading academic survey research projects studying public opinion and behaviors. Fifth, I have been invited to give lectures and teach courses on opinion measurement to the research staffs of federal agencies in Washington, as well as to researchers in the United Kingdom and the Netherlands.

11. I have been asked to offer opinions on several issues, including: (1) whether Empire Blue Cross and Blue Shield (hereinafter "EBCBS") subscribers were fully cognizant of the implications to themselves in believing that cigarette smoking is a cause of various severe undesirable health consequences, appreciating the power of the causal effect and the addictiveness of smoking, and understanding the array of undesirable health consequences produced, (2) whether the conduct of the tobacco companies impacted the perception of EBCBS subscribers of the health effects of

smoking, (3) if EBCBS subscribers were not fully cognizant in perceiving the addictiveness and severe health risks associated with smoking and/or the power of the causal effect, whether these perceptions would have become more accurate if tobacco companies had publicly stated that they believed smoking was addictive and/or a cause of severe undesirable health consequences (contrary to the course of conduct they followed), and (4) whether by increasing the accuracy of EBCBS subscribers' perceptions of the addictiveness and health risks of smoking, the effect of the tobacco companies' conduct would have reduced the extent of smoking among these individuals, either by preventing some of these people from starting to smoke in the first place or by instigating them to quit smoking after they had started.

12. To answer these questions, I have reviewed documents produced by the parties, reviewed the academic literature on cigarette smoking, reviewed reports of surveys done of the American public regarding cigarette smoking, analyzed the results of the individual discovery process in this case by reviewing deposition transcripts taken of a random sample of Empire subscribers, and designed and supervised the conduct of a new national survey. I have also drawn upon my pre-existing knowledge of the literatures on survey research methods and cigarette smoking.

13. As a result of my review of this body of evidence, I have reached the conclusions that (1) most EBCBS subscribers currently underestimate the health risks of cigarette smoking and have done so for decades, (2) statements by the tobacco companies contradicting and attacking the public health authorities conclusions over time regarding the causal link between smoking and serious diseases and the addictiveness of cigarettes impacted EBCBS subscribers' perception of risk, (3) public acknowledgement by tobacco

companies in the 1960s through to the 1990s that they believed smoking causes diseases and other serious health problems would most likely have led members of the general public and EBCBS subscribers to perceive the health risks of cigarette smoking more accurately, and (4) increasing the public's accuracy in recognizing these health risks by this means would most likely have significantly reduced smoking onset and quit rates among these individuals.

14. My comments below are organized in the following manner. I begin by explaining the logic and theory underlying survey research methods and the principles that justify generalizing from a systematically selected sample of people to the full population from which they are drawn. Then, I explain the methods used to sample and depose EBCBS subscribers regarding their beliefs about their smoking behavior. Within that section, I explain conclusions that can be drawn from those depositions about those beliefs and the impact of those beliefs on smoking behavior. Next, I review evidence from prior national surveys measuring Americans' beliefs about the health risks of smoking and finally describe the findings of a new national survey that I have conducted.

II. SURVEY RESEARCH METHODS

15. Survey research methods are now a well-established and solidly respected scientific approach to measuring beliefs and behavior of populations of individuals (Babbie, 1990; Weisberg, Krosnick, & Bowen, 1996). In this section of my report, I will explain the basic philosophy and guiding principles of survey methodology.

16. Conducting a survey research study involves three principal phases: (1) drawing a sample of respondents to represent a population, (2) collecting data from those respondents, and (3) analyzing the data generated to answer the questions of interest.

Surveys are usually done for one or both of two reasons: (1) to document the prevalence of some characteristic in a population (e.g., what proportion of Americans smoked 5 or more cigarettes during the month of January, 2000), and/or (2) to document causal processes that produce beliefs and behavior.

17. Survey research dates back at least to the 19th century, but the most significant developments and improvements in the method took place during the first half of the 20th century. During that time, researchers came to recognize that the method by which respondents are selected from a population can introduce substantial error to measurements if done improperly. Therefore, research on survey sampling has burgeoned during the last fifty years, and the result of this work is an excellent understanding of effective methods from drawing representative samples of populations.

18. The simplest and most effective method of sampling general populations is called simple random sampling. In drawing a simple random sample, the survey designer designates a desired sample size and randomly selects a sample of individuals from the population.

19. If simple random sampling is done, statistical principles permit precise documentation of the uncertainty associated with the sample in generalizing to the population due to what is called "sampling error." For example, if a researcher is interested in gauging the percentage of a company's employees who smoked 5 or more cigarettes each day during January, 2000, he or she could draw a simple random sample of size N from the population of all employees and interview each selected sample member whether or not he or she smoked 5 or more cigarettes each day during January.

2000. Imagine that a proportion p (somewhere between 0% and 100%) report having done so. The lower bound of the sampling error of that proportion, p , would be:

$$SE = \pm 1.96 \sqrt{p(1-p)/(N-1)}$$

if one sought to assess an interval in which the true value of the proportion is at least 95% likely to fall. That is, our best guess of the true proportion in the population of all employees would be the observed proportion, p , and there would be a 95% chance that the truth falls somewhere between $(p-SE)$ and $(p+SE)$. As the size of the sample approaches the size of the total population, SE gets a bit smaller than the formula above suggests. But most survey samples are much smaller than their relevant populations, so the formula offered above applies accurately to describe the sampling error involved.

20. For example, if 38% of 1,000 survey respondents said that their favorite color was blue, the sampling error of that proportion is:

$$SE = \pm 1.96 \sqrt{.38(1-.38)/(1,000-1)} = \pm 3\%$$

This means that there is a 95% chance that the true proportion of people in the population whose favorite color was blue is between 35% ($38\% - 3\%$) and 41% ($38\% + 3\%$). This, of course, assumes that the sample of 1,000 respondents was generated by simple random sampling.

21. The response rate for a survey is the proportion of eligible members of the selected sample from whom data are in fact collected. In most surveys, the response rate is less than 100%.

22. Decades of high-quality survey research have shown that the reliability and validity of survey responses under certain conditions are generally quite high, and

respondents can be relied upon to provide reasonably accurate descriptions of their past experiences, behaviors, and opinions. At the same time, some ways of gathering data from people yield more reliable and valid measurements than other methods.

23. Survey questions typically take one of two forms: closed-ended or open-ended. Closed-ended questions offer respondents sets of answer choices among which to choose, whereas open-ended questions allow respondents to answer in their own words. Closed-ended questions are asked more often than open-ended questions, because the former are easier and less expensive to administer, and the resulting data are easier and less expensive to analyze. However, a number of studies have shown that measurement accuracy is higher for open-ended questions than for closed-ended questions.

24. Inherent in the use of open-ended questions is the process called coding. Typically, "coders" are people who read and interpret open-ended answers and classify them into categories. For example, if survey respondents are asked, "What are the things you like and dislike about your job?", coders might be asked to read people's answers and classify the respondents into groups of people who mostly like their jobs, people who mostly dislike their jobs, people who are neutral toward their jobs, and people who are ambivalent toward their jobs.

25. Such a coding process is typically done by providing written transcripts of respondents' answers to survey questions and providing written instructions to coders regarding how to categorize the respondents based on their answers. To be sure that the coding instructions are understandable and workable, it is customary to have two coders independently code the same responses and then assess the extent to which their coding agrees. As long as this percentage is above 80%, researchers typically conclude that the

instructions are effective and suitable for full-scale implementation. However, this 80% figure is relatively arbitrary; some projects may proceed with somewhat lower rates of agreement, and others may require higher levels of agreement before proceeding with full-scale coding. If agreement rates are below 90%, it is common for researchers to have multiple coders code all responses and negotiate out their disagreements after they have done all coding. But if agreement rates are above 90%, a single coder can be used confidently to code each respondent's answers.

III. THE BC-BS SUBSCRIBER DEPOSITION SURVEY

A. Sampling Methodology

26. In this case, survey methods have been applied in the collection of data from deponents regarding their past experiences with cigarettes, perceptions and awareness of the risks of smoking, and the impact of the tobacco companies' conduct on their perceptions and related behavior. The sampling procedure implemented in this study, which I will call the "BC-BS Subscriber Deposition Survey," conformed to the standard practices of simple random sampling.

27. A total of 330 subscribers of four Blue Cross and/or Blue Shield plans (EBCBS, Blue Cross Blue Shield of Louisiana, Blue Cross Blue Shield of Michigan, and Blue Shield of California) were deposed as part of the BC-BS Subscriber Deposition Survey conducted in this case. My focus in this report will be on depositions taken from a simple random sample of 136 EBCBS subscribers. In addition, I have examined depositions taken from additional Blue Cross-Blue Shield subscribers deposed in connection with the individual discovery in this case. I will be prepared to offer opinions

about these depositions, which provide additional support for the conclusions offered herein.

28. It is my understanding that the court ordered 156 depositions be taken of EBCBS subscribers who had smoked 100 or more cigarettes in their lifetime (in addition to other depositions taken as well). To identify the 156 individuals to be deposed, a sample of individuals was drawn using simple random sampling procedures from a complete listing of all EBCBS subscribers who filed a claim during 1998. The sampled individuals were then interviewed by telephone by Audits & Surveys Worldwide to determine whether they had smoked 100 or more cigarettes during their lives. People who were found to have smoked 100 or more cigarettes were then contacted and depositions were scheduled.

B. Coding Methodology

29. In order to analyze the results of the BC-BS Subscriber Deposition Survey, standard coding practices were implemented, with which I have extensive experience. To begin this process, I recruited a group of coders to read the transcripts and answer a set of questions formulated for the purpose of determining the EBCBS subscribers' awareness of the risks of smoking and the effect of the tobacco companies' conduct on their behavior. The coders were graduate and undergraduate students at The Ohio State University. I have a great deal of confidence in the abilities of all these individuals and believe they were capable of performing the highest quality work for this project.

30. As in all coding projects of open-ended survey responses, these coders were neither informed of the purpose of the study nor were they informed of the results

JAN 22 2001 11:42 PM FR DEWEY BALLANTINE LLP.SS 6333 TO 9829164659497412 P.14

11

that were expected to emerge from their work. In fact, the coders were never told which party in the lawsuit was commissioning their work and would pay them.

31. To begin the coding process, two coders were given a set of 10 deposition transcripts, a set of the exhibits used during the depositions, and a set of coding instructions. Typically, in the context of standard coding process, coders are provided instructions formulated by the researcher. They were asked to code 10 depositions (selected randomly from among the depositions available at that time): White, B., 156NY-26; Pusz, P. A., 156NY-19; Place, N., 156NY-21; Marks, B., 156NY-15; Castellano, D., 156NY-23; Basley, W., 156NY-11; Cox, J., 156NY-27; Caruso, B., 156NY-2; Humphrey, L., 156NY-20; Skold-Nielsen, H., 156NY-4) independently according to the instructions, without discussing anything with each other. After they completed this task, they submitted the results to me, which revealed that they had agreed with one another in 97% of the decisions they were asked to make. This was an excellent agreement rate, and it documented the clarity and effectiveness of the coding instructions.

32. If a particular question had been responsible for a large number of the disagreements between the coders, this would suggest that the question might require rewording to permit reliable coding decisions to be made. Therefore, in order to explore whether the few disagreements the coders had with one another could be traced to either a particularly problematic question or a particularly inarticulate or confusing or ambiguous dependent, the coders were instructed to examine whether their disagreements were tied to any particular question or respondent. In fact, there was no evidence of such a pattern. Therefore, I concluded that the coding instructions were performing adequately and that no alteration of them was called for.

33. In total, coders were asked to answer 20 coding questions about each deponent (the coding instructions and these questions appear in Appendix B of this report). When the coders completed their coding, they submitted electronic spreadsheets to me listing their answers for each deponent. An integration of the coding spreadsheets appears in Appendix C of this report.

C. The Results of the BC-BS Subscriber Deposition Survey

34. Table 1 presents the coding results for the four questions that gauged deponents' beliefs about what they knew at the time they became regular cigarette smokers. 77% of the deponents said they believed they did not think smoking increases a person's chances of contracting a serious disease, and 92% said they believed they did not think smoking would increase their own chances of contracting a serious disease. 87% of the deponents said they believed they did not think they would become addicted to smoking. These are large majorities, of course, suggesting that when these people began to smoke, they were unaware of the principal risks of smoking. It is interesting to note here that these deponents manifested a pattern that has been confirmed in many other studies (as I will explain below): they were more likely to believe that smoking did not pose a health risk to themselves (92%) than to others (77%) and more likely to believe that smoking would not become addicting for themselves (87%) than for others (42%).

35. Table 2 shows the coding results for the five questions that gauged deponents' beliefs about what they knew at all times after they began to smoke cigarettes. 84% said they believed they eventually came to believe that smoking causes serious disease for people in general; 63% said they believed they eventually came to believe that smoking increased their own personal chances of experiencing a serious disease. Again,

deponents were more likely to believe that smoking does not pose a health risk to themselves (28%) than to others (11%). Consistent with these claims, 65% of respondents said they believed they never knew the name of a specific carcinogen in tobacco or cigarette smoke at any time when they smoked.

36. 79% of deponents said they believed they eventually came to think that smoking is addictive for people, and 76% said they believed they eventually came to think that they were personally addicted to smoking. Interestingly, these figures barely manifest the expected difference: people were apparently only slightly more willing to accept that others were at risk for addiction (79%) than were they themselves (76%), presumably because smoking provides many smokers with first-hand, hard-to-refute physical symptoms indicating their addiction. All the figures I just mentioned in Table 2 represent large majorities, but they are not unanimous majorities. Thus, between 16% and 36% of these deponents believed that they never came to recognize the health or addiction risks of smoking while they smoked.

37. Table 3 presents figures regarding what deponents believed they heard or heard about statements of the tobacco companies. 93% said they never heard or heard about a tobacco company saying that smoking increases the likelihood of serious disease, and 87% said they believed they never heard a tobacco company name a specific carcinogen in tobacco or cigarette smoke. 37% of deponents said they believed they heard or heard about tobacco company assertions that smoking does not cause serious disease, and 43% said they believed they heard or heard about tobacco company assertions that scientific evidence on this issue is inconclusive.

38. 87% of respondents said they believed they never heard or heard about any statement by any tobacco company that smoking is addictive. 12% said they believed they heard or heard about a tobacco company asserting that smoking is not addictive, and 4% said they believed they heard or heard about a tobacco company asserting that the scientific evidence on this issue is inconclusive.

39. Table 4 shows the coding results regarding deponents' beliefs about the likely effects that statements by tobacco companies would have had on them. 75% said they believed that a tobacco company statement that smoking causes disease would have led them not to start smoking, to quit, to quit sooner than they did, or to try to quit. 62% said they believed that a tobacco company statement that smoking is addictive would have led them not to start smoking, to quit, to quit sooner than they did, or to try to quit. And 74% of deponents said they believed that a tobacco company acknowledgement of the name of a specific carcinogen in tobacco or cigarette smoke would have led them not to start smoking, to quit, to quit sooner than they did, or to try to quit. Thus, majorities of the deponents believed that public statements by tobacco companies of what they knew to be true of the dangers of cigarettes would have reduced their rate of smoking.

40. All of this evidence is consistent with the assertions that most EBCBS subscribers who had submitted claims in 1998 and who were or had been cigarette smokers did not know of the dangers of smoking when they began to smoke and that substantial portions of these same subscribers never believed that smoking was dangerous and addictive and did not believe that they were at risk for contracting a serious disease at the time they began smoking or became regular smokers. Furthermore, these results are consistent with the conclusion that most EBCBS subscribers who had been smokers and

had submitted claims in 1998 would have smoked less or would not have smoked at all if tobacco companies had publicly acknowledged their belief in the existence of these dangers.

41. The results of the BC-BS Subscriber Deposition Survey can be extrapolated to the population of EBCBS subscribers who filed claims in 1998 and had been smokers, because the deponents were randomly sampled from that population. As explained above, the sampling error of each percentage derived from the deponents' responses is a maximum of 7.9%, meaning that the true percentage for the population has a 95% chance of falling within 8% of the observed percentage in each case. The closer an observed percentage is to 0% or 100% and the farther it is from 50%, the smaller this sampling error becomes. Therefore, some of the percentages reviewed above have smaller sampling errors than 7.9%. For example, the sampling error on the 93% percent of respondents who were coded "no" on coding question 1 is $\pm 4\%$.

IV. THE RESULTS OF PRE-EXISTING SURVEYS

A. Assessing Whether Americans Accurately Understood The Causal Impact of Cigarette Smoking on Health

42. I have also examined the results of a number of national surveys of representative samples of American adults conducted during the last four decades. Some of these studies were sponsored by government agencies responsible for promoting the public's health. Other studies were sponsored by private organizations dedicated to public health promotion. And still other studies were sponsored by tobacco companies. Taken together, the results of these studies consistently indicate that portions of the American public (i.e., any portion greater than 0%) have not fully recognized the health risks of cigarette smoking.

43. I examined these surveys based upon the following view of beliefs about the health effects of smoking. For a person to be accurate in understanding the health risks posed by smoking, that person must (1) believe that smoking definitely increases a person's chance of contracting some specific diseases, such as heart disease, lung cancer, and/or emphysema, (2) accurately recognize the extent to which a person's chances of contracting these diseases is increased by smoking, and (3) hold these beliefs with extremely high confidence. Therefore, if a person says that smoking "might" increase a person's chances of contracting lung cancer, that would not be accurate, because smoking definitely increases a person's chances of contracting lung cancer.

44. One relevant survey was conducted for the National Clearinghouse for Smoking and Health in the Spring of 1970. In this survey, about 70% of respondents strongly agreed that "smoking cigarettes is harmful to health." About 17% of respondents mildly agreed with this statement, and another 13% of respondent disagreed with the statement or said they didn't know whether they agreed or disagreed. Therefore, about 30% of respondents did not express an accurate perception on this issue.

45. Another survey was conducted for the Office on Smoking and Health of the Centers for Disease Control in 1986. In this survey, respondents were asked "Do you think a person who smokes is any more likely to get heart disease than a person who doesn't smoke?" About 79% of respondents said a smoker is more likely than a non-smoker, and about 21% of respondents said a smoker is not more likely or that they didn't know. In comparable questions, 92% of respondents said the smoker was more likely than the non-smoker to get lung cancer and about 8% of respondents said no or don't know. About 89% of respondents said the smoker was more likely than the non-smoker

to get emphysema, and about 11% said no or don't know. Thus, 21%, 8%, and 11% of Americans did not recognize these risks of smoking.

46. In a 1993 survey done by the Gallup Organization and sponsored by SmithKline Beecham, respondents were asked: "Does smoking cause or make these conditions worse?", and respondents were then read a list of medical problems. 84% of respondents answered "yes" for lung cancer, 75% answered "yes" for heart disease, 66% answered "yes" for oral cancers, and 65% answered "yes" for stroke. Thus, 16%, 25%, 34%, and 35% of respondents, respectively, failed to acknowledge these health effects of smoking.

47. In a 1992 survey by the Gallup Organization done for the American Lung Association, respondents were asked: "Which of the following health problems, if any, have been related to smoking?", and respondents were then read a list of health problems. 96% of respondents said "yes" for lung cancer, 85% said "yes" for emphysema, and 73% said "yes" for cardiovascular disease. Thus, 4%, 15%, and 27% of respondents, respectively, failed to acknowledge these health effects of smoking.

48. In a series of surveys done by the Gallup Organization, respondents were asked, "Do you think cigarette smoking is or is not harmful to your health?" The proportion of respondents answering "is not" or "don't know" was 10% in 1977, 10% in 1981, 8% in 1983, 6% in 1985, 6% in 1987, and 5% in 1989. In a related series of surveys in which respondents were asked "Do you think cigarette smoking is harmful, or not?", 40% said "no" or "don't know" in 1949, 30% said that in 1954, 10% said that in 1977, 9% said that in 1981, 4% said that in 1990, and 5% said that in 1999.

BEST
COPY

49. In another series of surveys by the Gallup Organization, respondents were asked, "Do you think that cigarette smoking is or is not one of the causes of lung cancer?" The proportion of respondents saying "is not" or "don't know" was 59% in 1954, 50% in 1957, 56% in 1958, 50% in 1960, 30% in 1969, 29% in 1971, 30% in 1972, 19% in 1977, 17% in 1981, 6% in 1990, and 8% in 1999 (though the question wording in 1999 was slightly different: "Do you think cigarette smoking is one of the causes of lung cancer, or not?"). The proportion of respondents saying "is not" or "don't know" in a comparable question about heart disease was 64% in 1957, 66% in 1958, 66% in 1960, 40% in 1969, 32% in 1977, 26% in 1981, 15% in 1990, and 20% in 1999 (though the question wording in 1957, 1990, and 1999 was slightly different: "Do you think cigarette smoking is one of the causes of heart disease?"). Regarding cancer of the throat, the proportion of respondents saying "is not" or "don't know" was 21% in 1977, 19% in 1981, and 10% in 1999 (though the question wording was slightly different in 1999: "How about cancer of the throat (do you think cigarette smoking is one of the causes)?").

50. In a 1986 survey done by ABC News and the Washington Post, a national sample of respondents was asked: "Do you think that a link between cigarette smoking and lung cancer has been established convincingly or not?" 19% of respondents said it had not been established or that they didn't know whether or not it had been established.

51. The Roper Organization conducted a series of surveys for the Tobacco Institute in 1970, 1972, 1974, 1976, and 1978. In each of these surveys, respondents were asked: "It's been said that cigarette smokers have more of certain illnesses than non-smokers. Would you say this is definitely true, probably true, possibly true, or not true? In each of the years, the following proportions of respondents said the assertion was "not

52434 5610

BEST
COPY

true" or said they didn't know whether or not it was true: 18%, 18%, 14%, 18%, and 15%, respectively.

52. Respondents who answered definitely true, probably true, or possibly true were asked a follow-up question: "Do you think cigarettes are a major cause of smokers having more of certain illnesses, or only one of many causes, or that cigarettes are really not a cause of smokers having more illnesses?" In each of the years, the following proportions of respondents said that smoking was not a cause of smokers' increased illness rates: 3%, 5%, 4%, 4%, and 3%, respectively. Thus, these individuals also apparently did not recognize health risks of smoking.

53. Taken together, these surveys yield a consistent picture. In the 1950s and 1960s, large proportions of Americans did not recognize the health risks of cigarette smoking. The proportion of Americans failing to recognize these risks has been falling over the past four decades, but very recent surveys show that the proportions of people not recognizing certain risks have not yet fallen to zero.

54. Interestingly, many of the figures offered above are likely to be underestimates of the proportions of people who did not recognize these health risks of smoking. This is because many of the questions asked in those surveys had a built-in bias likely to exacerbate the proportion of people appearing to hold accurate beliefs about risks. A large social science literature now documents what has come to be called "acquiescence response bias." This is a tendency of between 10% and 20% of just about any sample of people to agree with just about any assertion presented in an agree/disagree question or a yes/no question (for a review of this literature, see Krosnick & Fabrigar, forthcoming). Many of the questions described above involved such formats, so the

proportions of people who said "agree" or "yes" probably overstated the proportions of people who actually held the beliefs that those responses appeared to express. In all likelihood, then, even more people failed to recognize certain well-established health effects of smoking than those survey studies suggest.

55. There is an additional reason why these surveys are likely to understate the proportion of people who failed to recognize the health consequences of smoking as well. Much research documents that people typically see themselves as less at risk for experiencing undesirable life circumstance than they believe other people are (Weinstein, 1980, 1982, 1987). All the survey questions reviewed above asked respondents about their perceptions of other people's risk rather than their own. Had these respondents been asked whether smoking increases the chances that they personally would experience adverse health outcomes, even more respondents would probably have said "no" or "don't know" than said so about other people.

B. Pre-Existing Surveys Assessing Whether Americans Accurately Understood the Magnitude of the Causal Impact of Cigarette Smoking on Health

56. None of the questions asked in the surveys referred to above is useful for quantifying the precise magnitude of the risk that people perceived to be associated with smoking. We must therefore turn to other evidence to assess whether Americans are accurate or inaccurate in gauging how much a person's risk of experiencing serious health problems is increased as a result of smoking cigarettes.

57. One survey that has been used to assess people's perceptions of the magnitude of the health risk of smoking cigarettes was conducted by Audits & Surveys Worldwide in September, 1985. A question in this survey asked: "Among 100 cigarette smokers, how many of them do you think will get lung cancer because they smoke?"

Viscusi (1992) made extensive use of this question in his book, Smoking: Making the Risky Decision, to assess smokers' perception of the risk of smoking. Viscusi reported that the average probability reported by respondents in this survey who reported a probability was 43%.

58. Viscusi (1992) calculated what he considered to be the true percentage of smokers who get lung cancer due to smoking by dividing the number of people who die annually of lung cancer due to smoking (e.g., 93,000 in the 1980s) by the total number of smokers (e.g., 52.9 million in 1985) and converting the result from an annual figure to a figure applying to the lifetime of a smoker. This calculation approach yielded a probability of between 5% and 10%, on which Viscusi (1992) focused throughout his book as a benchmark of the true rate of lung cancer deaths due to smoking. By comparing this rate to the 43% average answer given by the Audits & Surveys respondents, Viscusi concluded that most people overestimate the risk of lung cancer due to smoking, vastly in fact.

59. Unfortunately, there are a number of significant problems with the wording of the questions and the analytic approaches taken to examining responses to them. These problems preclude the data considered by Viscusi (1992), as well as other such existing work, from yielding useful and valid measurements of the accuracy of Americans' perceptions of the magnitude of the health risks caused by smoking.

V. A NEW SURVEY ASSESSING WHETHER AMERICANS ACCURATELY UNDERSTOOD THE CAUSAL IMPACT OF CIGARETTE SMOKING ON HEALTH

A. Survey Methodology

60. In order to measure people's beliefs about the magnitude of the health risks of cigarette smoking in a more useful and informative way, a new survey was

conducted by Schulman, Ronca, Buouvalas, Inc. (hereafter SRBI) under my supervision. The measurement approach taken in this survey focused on the standard measure of the causal impact of a risk factor on the likelihood of a person acquiring a disease: relative risk. Relative risk is the ratio of the incidence rate of the disease among people exposed to the risk factor to the incidence rate of the disease among people not exposed to the risk factor (e.g., Mansner & Bahn, 1974). By writing and administering survey questions that sought people's perceptions of the rates of lung cancer among non-smokers and smokers (with a clearly specified dosage of cigarettes), I obtained figures with which I could calculate people's perceptions of the relative risk of lung cancer due to smoking, which could then be compared with medical data on the true relative risk.

61. The SRBI survey involved random digit dialing (RDD) to interview a nationally representative sample of American adults. Interviewing was conducted between August 24, 2000, and October 2, 2000 from SRBI's facility in New York City.

62. The data collection procedures for the study are described in Appendix D, and the final table of dispositions of the phone numbers appears in Appendix E.

63. Prior to the beginning of the interviewing, a quota was set such that at least a total of 2,000 interviews with current or former smokers would be conducted. After answering a couple of warm-up questions, respondents were asked whether they had smoked 5 cigarettes or more during the past 7 days (people who said "yes" were classified as current smokers). Respondents who said "no" to this question were asked whether they had smoked 100 cigarettes or more during their entire lives (people who said yes were classified as "former smokers"). 46% of the 4,473 people interviewed

identified themselves as current or former smokers, and these individuals continued with the interview. The remaining individuals were not asked any further questions.

64. The questionnaire used for the survey appears in Appendix F of this report.

65. When a telephone survey sample is generated via Random Digit Dialing and a single respondent from each contacted household is selected to be interviewed, it is necessary to weight the obtained data by the number of working voice telephone lines in the household and the number of adults living in the household in order to yield figures that are generalizable to the national population. This was done for all analyses reported below.

66. Among the questions asked of the current and former smokers were the following two:

"Next, I'd like to turn to a different topic: what you personally think about the effect of cigarette smoking on people's health. I'm going to read these next two questions very slowly to let you think about each part of them, and I can repeat each question as many times as you like before you answer, so you can be sure they are clear to you. First, if we were to randomly choose one thousand American adults who never smoked cigarettes at all during their lives, how many of those one thousand people do you think would get lung cancer sometime during their lives?"

"And if we were to randomly choose one thousand American adults who each smoked one pack of cigarettes a day every day for 20 years starting when they

were 20 years old, how many of those one thousand people do you think would get lung cancer sometime during their lives?"

67. The distributions of answers to these two questions appear in Table 5, and at the bottom of the columns are the mean and median values for the columns and the number of respondents who provided answers to each question. As the last column shows, the average number out of 1,000 20-year pack-a-day smokers that respondents thought would get lung cancer was 433.5, or about 43%, and the median value was 500, or 50%. As the prior column shows, the average number out of 1,000 non-smokers that respondents thought would get lung cancer was 188.2, or about 19%, and the median value was 100, or 10%.

68. In order to gauge people's perceptions of the increase in the risk of getting lung cancer caused by smoking, perceptions of relative risk were calculated by dividing each respondent's answer to the question about 1,000 smokers by his or her answer to the question about 1,000 non-smokers. Because this quantity is undefined for respondents who said none of the 1,000 non-smokers would get lung cancer (because the denominator of the relative risk formula for these people would be zero, and division by zero is impossible), 1 was added to these respondents' answers to the question about non-smokers to allow the relative risk quantity to be defined for all respondents.

69. The observed distribution of relative risk figures for the sample appears in Table 6. Down the left side of the table are various ranges of relative risk. The middle column of the table shows the percentage of respondents whose perceived relative risks fell in the range shown on the left side. Thus, 5.7% of respondents perceived a relative risk of less than 1, meaning that they thought smokers developed lung cancer less often

than non-smokers. 11.6% of the sample perceived a relative risk of 1.0, meaning that they thought smokers and non-smokers were equally likely to develop lung cancer.

17.3% of people perceived a relative risk between 1.01 and 1.99, and 16.0% of people perceived a relative risk between 2.00 and 2.99.

70. These estimates can be compared to the figures that appear in the 1989 Surgeon General's report, which indicate that the relative risk of death due to lung cancer for one-pack-a-day smokers as compared to non-smokers is about 13. Other published studies put the relative risk for many smokers as greater than 13. This figure can be viewed as an estimate of the relative risk of getting lung cancer if we assume that almost everyone who is diagnosed with lung cancer dies of it.

71. The last column of Table 6 shows the cumulative percentage of respondents who fell in each relative risk range or in one of the ranges listed above it in the table. Thus, the last column indicates that 80.6% of the sample perceived a relative risk less than 13. Thus, the vast majority of respondents perceived the relative risk of contracting lung cancer due to smoking to be less than the actual relative risk. Indeed, 50% of the respondents could be said to have vastly underestimated this relative risk, believing it is less than 3. Only about 0.6% of respondents estimated the relative risk about right (based on the figures in the 1989 Surgeon General's report), and 18.6% of respondents overestimated the relative risk of lung cancer due to smoking.

72. These results clearly support the conclusion that the vast majority of American current and former smokers currently underestimate the increase in risk of getting lung cancer due to smoking. Thus, even after extensive national publicity about

the health risks of smoking, most current and former smokers appear to believe that the increase in risk of getting lung cancer due to smoking is much less than it truly is.

73. The focus of this analysis has been people's perceptions of the relative risk of getting lung cancer due to smoking. As some of the surveys reviewed above indicate, lung cancer is one of the best-known health risks of smoking, if not the single best known. Consequently, Americans were less likely to underestimate the relative risk of lung cancer than they were to underestimate the relative risk of other diseases that are known to be caused by smoking. This means that if the two SRBI survey questions had asked about heart disease, oral cancers, or stroke instead of lung cancer, the prevalence of underestimation of relative risk would have been even greater than I observed for lung cancer.

B. Pre-Existing Studies Assessing Whether Beliefs About the Health Consequences of Cigarette Smoking Influence Smoking Onset or Quitting

74. The social science literature offers a number of studies that can be used to address the questions of whether beliefs about the health consequences of cigarette smoking influence smoking onset or quitting. That is, of interest here is whether believing that smoking is less risky enhances the chances that a non-smoker will begin to smoke cigarettes and that a smoker will quit smoking. If some non-smokers began to smoke cigarettes partly because they underestimated the health consequences of smoking, then making their beliefs about health consequences more accurate would have decreased the likelihood that they would have begun to smoke. And if some smokers failed to attempt to quit because they underestimated the health consequences of smoking, then making their beliefs about health consequences more accurate would have increased the likelihood that they would have quit or tried to quit.

claims. For example, if health beliefs are indeed causes of smoking onset, then people who smoke should, on average, believe that smoking is less risky than people who do not smoke. And indeed, a large number of studies show that, as compared to people who do not smoke cigarettes, people who do smoke are less likely to believe that smoking causes adverse health problems for people in general (e.g., American Cancer Society, 1969).

intended to smoke cigarettes in the future. Only four studies found no difference between smokers and non-smokers in the extent to which they believed smoking causes undesirable health effects (Burns & Williams, 1995; Grube, McGhee, & Morgan, 1986; McKenna et al. 1993; Schneider & Vannest, 1974).

76. There is a theoretical basis for expecting that at least some of the above correlation between health beliefs and smoking behavior is due to post-hoc rationalization of smoking behavior. As Festinger (1957) argued in his original statement of cognitive dissonance theory, cigarette smokers are likely to find it very uncomfortable to hold simultaneously the beliefs that they smoke cigarettes regularly and that smoking is bad simultaneously. One way to reduce the discomfort associated with holding these beliefs simultaneously is to deny or underestimate the health risks of smoking. Therefore, if a person begins to smoke for a reason unrelated to health considerations (e.g., an adolescent is especially anxious in social settings and believes smoking will help him or her relax or be viewed acceptably by his or her peers), he or she may subsequently reduce the extent to which he or she believes that smoking causes health problems.

77. Festinger's (1957) idea may well be true and may be partly responsible for the robust correlation observed between smoking/non-smoking status and belief in the health effects of smoking. However, evidence reported by McMaster and Lee (1991) suggests that smokers may reduce the cognitive dissonance by a different cognitive mechanism that Festinger (1957) also identified: downplaying the importance of the health risk by believing that health problems caused by smoking can be caught early and cured and that other risks posed in life are more threatening. Likewise, Loken (1982)

BEST
COPY

found that smokers perceived the health consequences of smoking to be less undesirable than did non-smokers. Thus, it appears that smokers cope with their cognitive dissonance at least partly by this mechanism, though they may also strategically downplay their perceptions of the likelihood of undesirable health consequences following from smoking.

78. Regardless of whether or how smokers cope with their cognitive dissonance, it is also possible that pre-existing differences between smokers and non-smokers in their beliefs about the health consequences of smoking may partly determine whether or not these individuals subsequently become smokers or not. In order to test this idea directly, it is necessary to collect data from a group of non-smokers repeatedly over time, initially measuring their beliefs about the health effects of smoking, and then assessing whether these beliefs predict who later becomes a smoker. In fact, some studies have done such analyses and have found that people who initially believed smoking has less deleterious impact on health were subsequently more likely to become smokers (Bauman & Cheneveth, 1984; Chassin, Presson, Pitts, & Sherman, 2000; Chassin, Presson, Sherman, & Edwards, 1991; cf., Collins et al., 1987). This is considered very strong evidence of causal impact of one factor on another (Pinkel, 1995; Kossler & Greenberg, 1981).

79. Weinstein (1980, 1982, 1987, 1998) has done and catalogued a great deal of research showing that people typically believe that they are less at risk personally of experiencing an undesirable life circumstance than are other people. This highly robust finding makes clear the importance of recognizing the distinction between people's beliefs about the health risks of smoking to people in general (which we have considered

thus far) and their beliefs about the health risks of smoking for themselves personally. In principle, smokers may be less likely than non-smokers to acknowledge the health effects of smoking on others, but smokers and non-smokers may be equivalent in perceiving the impact of smoking on their own personal health. But a series of studies contradict this claim: Benhiza, Slovic, and Severson (1993), McCoy et al. (1992), Grønhaug and Kangun (1979), Hansen and Malone (1986), Leventhal et al. (1987), Marshall (1990), Murray et al. (1994), Urberg and Robbins (1984), and Virgili, Owen, and Severson (1991) found that smokers were less likely to believe that smoking would cause undesirable health effects for them personally than were non-smokers. These findings are therefore consistent with the notion that these personalized health beliefs partly determine smoking behavior.

80. Another set of relevant evidence comes from studies that asked non-smokers why they don't smoke. In studies by Levin (1971) and Kahn and Edwards (1970), the most frequently given reason was to avoid the undesirable health effects of smoking. This, too, is consistent with the claim that perceptions of the health effects of smoking are important determinants of whether a person does or does not smoke.

81. Yet another finding of relevance here involves the strength of people's beliefs about the health effects of smoking. Even if a person is completely convinced that smoking substantially increases his or her risk of experiencing health problems, this belief may have no impact on his or her smoking behavior if he or she attaches no personal importance to those health effects (see, e.g., Petty & Krosnick, 1995). Therefore, attaching greater importance to health effects of smoking, coupled with the belief that smoking is deleterious, should lead to less smoking. Consistent with this

logic, Mettlin (1973) reported that people who attached more importance to the effects of smoking on health were indeed less likely to smoke.

82. One very robust finding at first appears to challenge the general conclusion that beliefs about the health effects of smoking are partial causes of smoking behavior. Gerrard et al. (1996), Harrison et al. (1996), Lee (1989), McKenna et al. (1993), McMaster and Lee (1991), Pervin and Yarkin (1965), Strecher et al. (1995), Swinehart (1966), Weinstein (1987), and Williams and Clarke (1997) found that smokers were more likely than non-smokers to say that they themselves would get a smoking-related disease during their lifetimes. Likewise, Hurd and McGarry (1995) and Schoenbaum (1997) found that smokers were less likely to believe they would live to ages 75 and 85 than non-smokers said of themselves. And Greening and Dollinger (1991) reported that smokers said "a person like them" was more likely to die of cancer, stroke, or emphysema than did non-smokers. At first glance, these results seem to conflict with the ones reported previously, showing that smokers think the health risks of smoking are less than non-smokers do.

83. But it is important to recognize that the questions used to measure beliefs about likelihood of experiencing illnesses and life expectancy in these studies did not mention cigarettes or smoking. That is, these questions did not measure people's perceptions of the impact of smoking on their own health or likelihood of death. And it turns out that smokers do not in fact see themselves to be more likely to experience smoking-related diseases uniquely. Instead, smokers perceive themselves to be more likely than non-smokers perceive themselves to experience a wide range of undesirable physical conditions, including ones clearly unrelated to smoking. For example,

Swinehart (1966) found that smokers said they were more likely than did non-smokers to get the flu. Harrison et al. (1996) found that smokers said they were more likely to "have an accident" or develop arthritis than non-smokers said of themselves. And McKenna et al. (1993) found that smokers were more likely than non-smokers to say they would get arthritis, become sterile, get venereal disease, and develop cirrhosis of the liver.

84. It appears that these perceptions are grounded in observable real-life events and general risk factors. For example, smokers report having had more recent hospitalizations, more recent visits to doctors, more chronic health conditions, and more restricted physical activity than do non-smokers (Halpern & Warner, 1994). And smokers perceive themselves as having higher levels of risk factors other than smoking. For example, Reppert et al. (1991) found that smokers reported experiencing more stress than did non-smokers. Thus, although the rates at which smokers report experiencing health problems and expect to experience health problems exceed the rates reported by non-smokers, this is not confined to smoking-related health problems.

85. Lastly, much research is consistent with the general claim that beliefs about the health consequences of smoking are important instigators of efforts to quit smoking. For example, Dozois, Farrow, and Miser (1995) found that 72% of a sample of current cigarette smokers had reported attempting to quit smoking at least once previously, and the reason given most often for trying to quit was to avoid the undesirable health consequences of smoking. Likewise, Ahluwalia et al. (1998), Crowe et al. (1994), Dappen et al. (1996), Duncan et al. (1992), Haaga et al. (1993), Halpern and Warner (1993), Lichtenstein and Cohen (1990), Schneider (1984), and Swenson and Dalton (1983) reported that the reason ex-smokers gave most often for quitting or wanting to quit

BEST
COPY

was improved physical health and longevity. And Stone and Kristeller (1992) found that the deleterious health effects of smoking were the most commonly given reason by smokers for wanting to quit smoking.

86. Consistent with that evidence, Curry et al. (1990) found that people who were motivated to quit for health reasons had a greater desire to quit than people motivated by other reasons. Borland (1997a) found that people who were more motivated by health concerns were more likely to intend to quit and were more likely to attempt to quit subsequently. And Rose et al. (1996) and Klesges et al. (1988b) found that people who believed more in deleterious health consequences of smoking were subsequently more likely to attempt to quit (c.f., Ahluwalia et al., 1998; Chassin, Presson, & Sherman, 1984).

87. Also consistent with the notion that beliefs about health consequences partly determine success of quitting attempts, Tipton (1988) and Kanfert et al. (1986) found that among people who participated in a smoking cessation program, those who initially believed more strongly that smoking causes health problems were most likely to be successful in quitting smoking (c.f., Klesges et al., 1988b). And a number of studies found that people who tried to quit smoking for health reasons were subsequently more likely to succeed than people who tried to quit for other reasons (Borland, 1997a; Curry et al., 1990; Duncan et al., 1992; Halpern & Warner, 1993; c.f. Rose, Chassin, Presson, & Sherman, 1996).

88. If beliefs about the health risks of smoking are indeed causes of smoking onset and quitting, then we should observe in the SRBI survey data the same relation documented in the dozens of studies reviewed above: current smokers should perceive

BEST
COPY

less risk of smoking than do current non-smokers. The SRBI survey sample included both current and former smokers, so I could test this hypothesis by assessing whether the latter individuals manifested higher perceived relative risk than did the former individuals. And in fact, the median relative risk perceived by current former smokers was twice the median relative risk perceived by current smokers (4.00 vs. 2.00; difference: Mann-Whitney U=371895, $p<.001$, $N=1903$). This finding not only reinforces confidence in the claim that smoking onset and quitting are affected by health beliefs but also reinforces confidence in the validity of the SRBI survey's measure of perceived relative risk.

89. The SRBI survey data also permit testing another notion that should be true if beliefs about health consequences are causes of quitting behavior: people who perceive greater relative risk of lung cancer from smoking should regret smoking more and should be more motivated to quit smoking (beliefs that are presumably instigators of quitting attempts). The SRBI survey permits testing this idea because all respondents were asked two pairs of questions measuring regret regarding smoking, and respondents who said they were currently smokers were asked additional questions about their desire to quit:

Regret. "Do you wish at all that you had never started to smoke cigarettes, or do you not wish that at all?"¹ [IF DO WISH:] How much do you regret having started to smoke cigarettes? A great deal, quite a bit, somewhat, or a little?"²

Unhappy. "When you think about having smoked cigarettes in the past, does that make you feel unhappy at all, or does it not make you feel unhappy?"³ [IF

DOES:] "How unhappy does that make you feel? Extremely unhappy, very unhappy, somewhat unhappy, or slightly unhappy?"⁴

Like to stop. "Would you like to stop smoking cigarettes, or would you not like to stop smoking cigarettes?"⁵ [IF WOULD:] "How much would you like to stop smoking cigarettes? A great deal, quite a bit, somewhat, or a little?"⁶

Likelihood of trying to quit. "How likely is it that you will try to quit smoking during the next 3 months? Definitely will try, probably will try, may or may not try, probably will not try, or definitely will not try?"⁷

90. Answers to each of the first three pairs of questions were combined to yield three 5-point scales (e.g., 5=regret a great deal, 4=regret quite a bit, 3=regret somewhat, 2=regret a little, and 1=not regret at all). The four resulting 5-point scales measuring regret and desire to quit were correlated as expected with perceived relative risk of smoking: $r=.12$ ($p<.001$, $N=1887$), $r=.12$ ($p<.001$, $N=1884$), $r=.18$ ($p<.001$, $N=938$), and $r=.12$ ($p<.001$, $N=942$), respectively, for Regret, Unhappy, Like to stop, and Likelihood of trying to quit.⁸ These correlations mean that people who perceived a higher relative risk of lung cancer from smoking were more likely to regret having smoked and were more likely to want to quit and to intend to try to quit in the near future.

91. Taken together, these various sorts of past studies offer a strong array of empirical support for the claim that beliefs about health consequences are causes of cigarette smoking onset and quitting. Believing that smoking is less damaging to health allows a person to begin smoking more readily, and believing that smoking is more damaging to health inspires people to try to quit smoking and to succeed in quitting. Therefore, if Americans were led to recognize that the health consequences of smoking

are more damaging than they have been or were not led to believe that the scientific evidence on the health effects of smoking was inconclusive, this would most likely have led to a reduction in smoking behavior.

C. Certainty of Beliefs About Smoking's Effects on Health

92. A great deal of research in psychology shows that the more confident people are in a particular belief they hold, the more impact that belief has on their thinking and action (see Petty & Krosnick, 1995). So, for example, the more confident a person is that daily exercise will prolong life, the more likely he or she is to perform daily exercise (presuming, of course, that he or she values prolonged life). Therefore, among people who believe that cigarette smoking causes adverse health effects, the more confident these individuals are in the accuracy of that belief, the less likely they are to smoke. It is therefore of interest to know how confident the Americans who believe that smoking causes adverse health effects are in this belief. If large numbers are not maximally confident, that would mean they are not fully convinced of that assertion and that increased certainty would most likely reduce smoking rates among these individuals (by inspiring quitting and inhibiting onset).

93. The SRBI survey afforded an opportunity to explore this issue; it included questions that no past study of which I am aware included. Respondents who said that the 1,000 smokers were more likely than the 1,000 non-smokers to get lung cancer were then asked: "You said that the smokers are more likely to get lung cancer than non-smokers. How certain are you about that? Extremely certain, very certain, somewhat certain, slightly certain, or not certain at all?"

94. Of the respondents asked this question, only 29.8% said they were extremely certain. 29.1% said very certain, 25.5% said somewhat certain, 7.2% said slightly certain, 8.2% said not certain at all, and 0.3% said "don't know" or refused to answer the certainty question. Thus, a majority of the respondents who believed that smokers are more likely than non-smokers to get lung cancer were not maximally certain about that. An increase in certainty in that belief is therefore possible for most of these individuals and would most likely increase the impact of that belief on their smoking behavior.

D. Would Public Statements by Tobacco Companies Have Changed Public Beliefs About the Health Risks of Smoking Cigarettes?

95. Thus far, I have reviewed evidence indicating that people underestimate the health risks of smoking and that beliefs about the health effects of smoking are causes of smoking onset and quitting. The next evidence I reviewed addresses the question of whether if tobacco companies had stated publicly that they believed smoking causes adverse health effects and had not misrepresented their knowledge concerning the causal link between smoking and serious adverse health consequences, these statements and omissions would have increased the public's belief in those health effects and thereby reduced smoking in the American public.

96. One set of evidence consistent with this latter claim is evidence that public statements by any authority figure or organization or expert on smoking affects the public's belief in that assertion and reduces smoking. In a series of time-series studies, Warner (1977, 1981, 1989; Warner & Murt, 1982) has shown that releases of the Surgeon General's reports on smoking and health reduced cigarette consumption in the United

States, as did televised anti-smoking advertisements carrying the same message from the federal government to the American public.

97. However, Americans were apparently not fully convinced of the health effect claims made by the Surgeon General, as documented by the survey evidence reviewed above. One likely reason for this is suggested by Swinchart's (1966) research. He measured people's opinions about smoking and health on three occasions, 2 weeks, 1 month, and 3 months after the Surgeon General's Advisory Committee's 1964 report on Smoking and Health was issued. Over these three measurements, respondents expressed increasing skepticism about the bias of the authors and the quality of the evidence they cited. This suggests that the report was not considered maximally credible and was therefore not fully persuasive on its own and in the context of other public statements made by tobacco companies at the time. If other people or organizations had made comparable public statements about the impact of smoking on disease, and these other information sources were not perceived as overly concerned and alarmist about the public's health, the public might have become more convinced than they were of this causal link.

98. A great deal of research on persuasion by social psychologists indicates that tobacco companies would have been especially persuasive sources of such a message. This is because people often judge the credibility or believability of a message based upon the possible motives of the source of the message. One possible motivation for uttering a message is the genuine veracity of the claims made in the message. But message recipients recognize that sources can sometimes make inaccurate statements because of a pursuit of material self-interest, which occurs when acceptance of a

BEST
COPY

message's claim by an audience will enhance the well-being of the source (for example, as in a television advertisement paid for by Hilton Hotels in which the CEO of Hilton Hotels asserts that theirs are the best hotels in the world). When a source might have such an obvious ulterior motive for making an assertion, people are skeptical of it and less likely to be persuaded by the message. But when a source's message undermines his or her material self-interest (as in when the CEO of Hilton Hotels asserts that Westin Hotels are the best hotels in the world), audience members are especially likely to believe the assertion and to be persuaded by it (Eagly & Chaiken, 1975; Eagly, Chaiken, & Wood, 1981; Eagly, Wood, & Chaiken, 1978; Walster, Aronson, & Abrahams, 1966).

99. If tobacco companies had issued public statements beginning in the 1950s and 1960s and thereafter that they believed cigarette smoking causes serious diseases or that they agreed with the public health authorities' conclusions, doing so would clearly have been against their material self-interests. Therefore, these messages would most likely have been perceived as especially credible. This credibility means that such statements by tobacco companies would have been especially likely to produce belief change in the American public.

100. In this survey, I attempted to test scientifically whether simultaneous exposure to statements by the Surgeon General and tobacco companies that smoking causes disease increase smokers' regret about smoking and desire to quit smoking today. If this proved to be true, it would reinforce confidence that this would have happened in the past as well.

101. To accomplish this test, the SRBI survey included an experiment. This experiment was designed to simulate different information environments and explore the

impact that different messages have on smokers' regret about smoking and desire to quit.

The survey measured respondents' regret about smoking and desire to quit, and this measurement was preceded for some respondents by exposure to statements about the health effects of smoking. Using the resulting data, I assessed whether this exposure changed respondents' levels of regret and desire to quit.

102. The SRBI survey respondents were each randomly assigned to one of four groups, which I will call the "control" group, the "SG" group (for Surgeon General), the "TB" group (for Tobacco), and the "SGTB" group (for Surgeon General and Tobacco). Prior to being asked the four questions labeled above as Regret, Unhappy, Desire to quit, and Likelihood of trying to quit (which I will call measures of Motivation to Quit).

respondents in the SG, TB, and SGTB groups were asked a series of recognition questions about whether or not they had heard or read a variety of statements made publicly about the health effects of smoking. In this way, these respondents were exposed to these statements. The respondents in the control group were not asked any recognition questions, so they were exposed to no new information prior to the measurement of Motivation to Quit.

103. The recognition questions asked of the SG respondents were:

"Next, I'd like to read you some statements and ask whether you probably heard or read each one before today or probably did not hear or read each one. The first statement has been printed on some packages of cigarettes. It says: QUOTE Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy. END QUOTE Do you think you probably did hear or read that statement before today, or do you think you probably did not hear or read it?"

"The next statement was made in 1979 by the Surgeon General of the United States, whose job in the federal government is to protect and advance the health of all Americans. He said: QUOTE Cigarette smoking is causally related to lung cancer in both men and women. The risk of developing lung cancer is increased with increasing dosages of smoking. END QUOTE Do you think you probably

"The last statement was made recently by the chairman and chief executive officer of Brown and Williamson Tobacco Corporation. He said, QUOTE We agree with the judgment of public health authorities that smoking is a cause of lung cancer. END QUOTE Do you think you probably did hear or read that statement before today, or do you think you probably did not hear or read it?"

"The next statement was printed recently in newspaper advertisements by Philip Morris USA, which is a tobacco company. It says: QUOTE ... cigarette smoking causes lung cancer, heart disease, emphysema, and other serious diseases in smokers. Smokers are far more likely to develop serious diseases, like lung cancer, than non-smokers. END QUOTE Do you think you probably did hear or read that statement before today, or do you think you probably did not hear or read it?"

"I'd like to read you some statements and ask whether you probably heard or read each one before today or probably did not hear or read each one. The first statement was made in 1953 by an R. J. Reynolds Tobacco Company employee in a report written for that company. The report said, QUOTE Studies of clinical data tend to confirm the relationship between heavy and prolonged tobacco smoking and the occurrence of cancer of the lung. END QUOTE Do you think you probably did hear or read that statement before today, or do you think you probably did not hear or read it?"

105. Respondents to the TB group were asked three different recognition

involving the tobacco companies within the past several years.

below, this is not surprising in light of the media attention given to various lawsuits

statement, and 66.3% said they probably heard or read the third statement. As discussed

heard or read the first statement; 79.4% said they probably heard or read the second

did hear or read these three statements. 93.8% of these respondents said they probably

104. Not surprisingly, the vast majority of these respondents said they probably

before today, or do you think you probably did not hear or read it?"

per day. END QUOTE Do you think you probably did hear or read that statement

cancer increases with duration of smoking and the number of cigarettes smoked

the Surgeon General. The statement is: QUOTE The risk of developing lung

"The last statement was made in 1964 in a report of the Advisory Committee to

did hear or read that statement before today, or do you think you probably did not

Produced by RIRTC

BEST
COPY

106. Many Americans were probably exposed to the Philip Morris advertisements mentioned in the second statement and the final quote from the CEO of Brown and Williamson, because they appeared in many newspapers across the country (the latter in a wire service story covering testimony given in a tobacco-related trial in Florida). And smokers are generally more interested in information about the health risks of smoking than are non-smokers (e.g., Feather, 1962, 1963), so the SRBI survey respondents (all smokers or former smokers) were probably especially attentive to these quotes when they appeared in newspapers, enhancing these people's ability to remember those statements later. It is therefore not surprising that large proportions of the TB group respondents said they had probably heard or read those statements. 86.8% said they probably heard or read the second statement, and 63.1% said they probably heard or read the third statement.

107. More surprising is the fact that 64.4% of respondents said they thought they had probably heard or read the first quote, which appeared in a confidential tobacco company document that I believe has not received wide-spread publicity. However, perhaps due to publicity of a tobacco company employee's belief in the health effects of smoking in the movie, *The Insider*, as well as other recent publicity of tobacco litigation, many respondents may have recalled hearing or reading about such a statement being made by a tobacco company employee.

108. Note that the three quotes that the TB group heard say exactly the same things as the three quotes that the SG group hears. For both groups, two of the quotes they heard said that smoking causes lung cancer, and the third quote said that smoking causes lung cancer, heart disease, and emphysema, among other diseases. Thus, other

than slight wording changes, the SG and TB groups heard essentially the same messages offered by two different sources: The Surgeon General and tobacco companies.

109. Respondents in the SGTB group were asked six recognition questions, the three that were asked of the SG group, followed by the three that were asked of the TB group. The proportions of the SGTB group who said they probably heard or read these statements were relatively similar to those proportions in the SG and TB groups (91.0%, 83.9%, 64.1%, 49.5%, 76.4%, 54.6%, respectively).

110. Because respondents were randomly assigned to the control, SG, TB, and SGTB groups, their demographic characteristics should be extremely similar on average, and indeed they were. For example, the proportions of the four groups who were Caucasian were 87%, 86%, 85%, and 85%, respectively. The proportions of the groups who had graduated from high school were 59%, 51%, 51%, 54%, respectively. The proportions of the groups who had household incomes between \$31,000 annually and \$40,000 annually were 12%, 11%, 12%, and 10%, respectively.

111. Likewise, the four groups were extremely similar in terms of two opinions they reported at the start of the interview in answer to these two questions:

"Let's begin with some general questions. First, how would you describe the quality of health care that most Americans receive these days: Excellent, very good, good, fair, or poor?"

"And how would you describe the job President Clinton has done in handling health care issues during his presidency: Excellent, very good, good, fair, or poor?"

The proportions of the four groups of respondents who rated the quality of American health care as "good" were 31%, 31%, 33%, and 32%, respectively. Likewise, the proportions of the groups who rated President Clinton's handling of health care as "good"

were 23%, 27%, 26%, and 24%, respectively. Thus, it appears that the random assignment procedure yielded four groups that were quite equivalent.

112. My purpose in varying the recognition questions that preceded the Motivation to Quit measures was to explore the effect that hearing those statements would have on people's motivation to quit. I expected that exposure to the Surgeon General's quotes alone would not provide any novel information to respondents, so the level of Motivation to Quit reported by SG group respondents would be comparable to that of respondents in the control condition. To test this idea, I averaged the four measures of Motivation to Quit to yield a single index and tested whether respondents in the control group had a different level of Motivation to Quit than did the respondents in the SG group (3.15 vs. 3.06, respectively, on a scale from 1, meaning highest Motivation to Quit, to 5, meaning lowest Motivation to Quit). These two groups' means were not significantly different from one another ($p=.24$), consistent with my expectation. Therefore, these two groups were combined for subsequent analysis.

113. The SGTB group heard quotes that simulated what Americans would have heard beginning in the 1950s and 1960s if tobacco companies had not misrepresented their own knowledge and said publicly that they believed smoking has deleterious health consequences. That is, Americans would have heard both the Surgeon General and the tobacco companies saying simultaneously that smoking causes cancer, heart disease, and other diseases. Consistent with my expectation, this group's average Motivation to Quit (2.91) was significantly higher than that of the control group and SG group combined (3.10). In fact, the likelihood that this difference between groups in Motivation to Quit was caused by hearing the six quotes is greater than 99%.

114. The fact that this effect emerged at all is remarkable. The manipulation that induced the change in motivation to quit was exceedingly small: hearing three one-sentence quotes by tobacco companies or company employees. These quotes said exactly what the SGTE group respondents had just heard, so the tobacco company statements offered respondents no new content. And the majority of respondents were apparently already familiar with these quotes, having heard them before the survey interview, which should minimize their novelty and impact. Thus, any effect of the manipulation at all overcomes these various forces working against it and attests to the fact that statements such as these by tobacco companies can induce increased motivation to quit smoking. If tobacco companies had acknowledged publicly what they knew beginning in the 1950s about the health effects of smoking, they would most likely have done so repeatedly over a long period of time, and these admissions would most likely have received extensive publicity, which would most likely substantially increase their impact over what was observed in this small survey experiment.

115. In sum, the finding of this experiment is consistent with the notion that simultaneous exposure in the 1950s and 1960s and thereafter to messages from, on the one hand, the Surgeon General and other public health authorities and, on the other hand, the tobacco companies acknowledging the health consequences and addictiveness of smoking would have increased Americans' desire to quit smoking and the frequency of actual quitting, thereby decreasing national smoking rates.

E. Are Blue Cross-Blue Shield Subscribers Different from Non-Subscribers?

116. This litigation is focused on the beliefs and behavior of Blue Cross-Blue Shield subscribers regarding cigarette smoking, yet much of the evidence reviewed above

examines the beliefs and behavior of general public samples, some of whom were not Blue Cross-Blue Shield subscribers. In order to confidently draw inferences about Blue Cross-Blue Shield subscribers using data from these general public samples, it would be helpful to know whether Blue Cross-Blue Shield subscribers differ systematically in their beliefs or behavior about smoking from non-subscribers. A lack of difference would justify some confidence in using data on the general public to make inferences about Blue Cross-Blue Shield subscribers.

117. It is possible to address this issue using data from the SRBI survey, because respondents in that survey were asked three questions to establish lifetime Blue Cross-Blue Shield membership status:

"Do you currently have health insurance that would pay for some or all of the costs of you getting medical care, or do you not have health insurance at this time?" [IF DO HAVE:] "Is your health insurance from a company whose name includes the words 'Blue Cross' or 'Blue Shield' or is it from another company?"

[FOR RESPONDENTS WHO ANSWERED EITHER OF THE ABOVE TWO QUESTIONS "NO":] "Have you ever had health insurance from a company whose name includes the words 'Blue Cross' or 'Blue Shield' or have you never had health insurance from a company whose name includes the words 'Blue Cross' or 'Blue Shield'?"

118. Consistent with the expectation that these two groups of people do not differ notably, people who were never Blue Cross-Blue Shield subscribers did not differ from subscribers in their perceived relative risk of lung cancer from smoking

(Median = 2.80 for non-subscribers and 3.00 for subscribers; $p = .79$, $N = 1903$). Likewise,

the correlations of perceived relative risk with Regret, Unhappy, Like to Stop, and Likelihood of trying to quit were quite comparable for Blue Cross-Blue Shield subscribers ($r=.11$, $p<.001$, $N=1161$; $r=.08$, $p<.01$, $N=1156$; $r=.16$, $p<.001$, $N=507$; and $r=.10$, $p<.03$, $N=512$, respectively) and for non-subscribers ($r=.13$, $p<.001$, $N=736$; $r=.18$, $p<.001$, $N=736$; $r=.20$, $p<.001$, $N=416$; and $r=.16$, $p<.001$, $N=415$, respectively). The distribution of certainty judgments regarding the link between smoking and lung cancer was not significantly different ($p=.12$) for Blue Cross-Blue Shield subscribers (32.1% extremely certain, 28.6% very certain, 25.2% somewhat certain, 6.4% slightly certain, 7.5% not certain at all, and 0.3% "don't know" or refused, $N=973$) and non-subscribers (26.1%, 29.8%, 26.0%, 6.6%, 9.1%, and 0.5%, respectively; $N=605$). And the impact of hearing quotes from the Surgeon General and the tobacco companies was not significantly different among Blue Cross-Blue Shield subscribers and non-subscribers ($p=.71$, $N=1477$). All this justifies some confidence in making inferences about the likely characteristics of Empire Blue Cross-Blue Shield subscribers from data on general public samples that include non-subscribers.

Conclusion

119. Taken together, this evidence supports several conclusions: (1) American smokers have significantly underestimated the health risks of smoking, (2) Smoking onset and quitting behavior are caused by people's beliefs about the health consequences of smoking, (3) Therefore, improving the accuracy of people's beliefs about the health effects of smoking would have led to a reduction in smoking onset and an increase in quitting, (4) If tobacco companies had made frequent, prominent public statements that smoking causes adverse health consequences (as opposed to what they actually did),

Americans would have smoked less as a result, and (5) Most 1998 Blue Cross-Blue Shield subscribers believe that when they began to smoke, they did not recognize the health consequences and addictiveness of smoking, (6) Most 1998 Blue Cross-Blue Shield subscribers believe that after they began to smoke, they eventually learned that smoking was dangerous and addictive, but significant portions of these people believed that they never adopted those beliefs while smoking, (7) Most 1998 Blue Cross-Blue Shield subscribers believe that if tobacco companies had stated publicly that smoking causes disease and/or is addictive, these individuals would have smoked less or not at all, and (8) Blue Cross-Blue Shield subscribers who smoked are very similar to non-subscribers who smoked in terms of their beliefs about smoking, which suggests that it is reasonable to generalize from general public samples to Blue Cross-Blue Shield subscribers in these regards.

Jon A. Kroenick

Footnotes

1. Because respondents expect questions with dichotomous positive/negative answer choices to offer the positive option before the negative option and violating this expectation disrupts people's cognitive processing of the question and reduces the accuracy of their answers (Holbrook et al., forthcoming), these two response choices were read to all respondents in the order in which they appear here.

2. For half the respondents (chosen randomly), the response options were read in the order shown here, and the other half of the respondents heard those response options in the reverse order. This was done to prevent presentation order from biasing respondents toward one end or the other of the rating scale (see, e.g., Krosnick & Fabrigar, forthcoming, chapter 5).

3. Because respondents expect questions with dichotomous positive/negative answer choices to offer the positive option before the negative option (Holbrook et al., forthcoming), these two response choices were read to all respondents in the order in which they appear here.

4. For half the respondents (chosen randomly), the response options were read in the order shown here, and the other half of the respondents heard those response options in the reverse order.

5. Because respondents expect questions with dichotomous positive/negative answer choices to offer the positive option before the negative option (Holbrook et al., forthcoming), these two response choices were read to all respondents in the order in which they appear here.

JAN 22 2001 11:53 PM FR DEWEY BALLANTINE LLP 59 6033 TO 902915#659497#12 P.52

52434 5641

6. For half the respondents (chosen randomly), the response options were read in the order shown here, and the other half of the respondents heard those response options in the reverse order.

7. For half the respondents (chosen randomly), the response options were read in the order shown here, and the other half of the respondents heard those response options in the reverse order.

8. Because the distribution of relative risk scores was extremely skewed (as shown in Table 6), the assumptions necessarily made by conventional parametric statistics would not be met. Therefore, to compute these correlations, respondents' scores on the relative risk measure were converted to percentiles to permit these associations to be computed reasonably.

9. For half the respondents (chosen randomly), the response options were read in the order shown here, and the other half of the respondents heard those response options in the reverse order.

References

- Ahluwalia, J. S., Resnicow, K., & Clark, W. S. (1998). Knowledge about smoking, reasons for smoking, and reasons for wishing to quit in inner-city African Americans. Ethnicity Dis., 8, 385-393.
- American Cancer Society. (1969-1970). Teenage smoking, New ACS study shows young people's beliefs and behavior. Cancer News, 23, 3-7.
- Babbie, E. (1990). Survey research methods. Belmont, CA: Wadsworth.
- Bauman, K. E., & Chenoweth, R. L. (1984). The relationship between the consequences adolescents expect from smoking and their behavior: a factor analysis with panel data. Journal of Applied Social Psychology, 14, 28-41.
- Beaglehole, R., Eyles, E., & Harding, W. (1978). Cigarette smoking habits, attitudes and associated social factors in adolescents. New Zealand Medical Journal, 87, 239-242.
- Benthin, A., Slovic, P., & Severson, H. (1993). A psychometric study of adolescent risk perception. Journal of Adolescence, 16, 153-168.
- Bewley, B. R., & Bland, J. M. (1977). Academic performance and social factors related to cigarette smoking by schoolchildren. British Journal of Preventive and Social Medicine, 31, 18-24.
- Bewley, B. R., Bland, J. M., & Harris R. (1974). Factors associated with the starting of cigarette smoking by primary school children. British Journal of Preventive and Social Medicine, 28, 37-44.
- Borland, R. (1997a). Tobacco health warnings and smoking-related cognitions and behaviors. Addiction, 92, 1427-1435.

- Boyle, C. M. (1968). Some factors affecting the smoking habits of a group of teenagers. *Lancet*, 2(7581), 1287-1289.
- Brownson, R. C., Thompson, J. C., Wilkerson, J. C., Davis, J. R., Owens, N. W., & Fisher, E. B. (1992). Demographic and socioeconomic differences in beliefs about the health effects of smoking. *American Journal of Public Health*, 82, 99-103.
- Burns, J. C., & Williams, J. N. (1995). A survey to determine the knowledge of military members about the hazards of tobacco use, and a resulting tobacco-hazard education project. *Journal of Cancer Education*, 10, 37-40.
- Cannell, C. F., & MacDonald, J. C. (1956). The impact of health news on attitudes and behavior. *Anthropology Quarterly*, 33, 315-323.
- Cartwright, A., & Martin, F. M. (1958). Some popular beliefs concerning the causes of cancer. *British Medical Journal*, 2, 592.
- Cartwright, A., Thomson, I. G., et al. (1960). An attitude study among schoolchildren, touching also on parental influence. *British Journal of Preventive and Social Medicine*, 14, 28-34.
- Cecil, H., Evans, R. I., & Stanley, M. A. (1996). Perceived believability among adolescents of health warning labels on cigarette packs. *Journal of Applied Social Psychology*, 26, 503-519.
- Chapman, S., West, W., & Smith, W. (1993). Self-exempting beliefs about smoking and health: differences between smokers and ex-smokers. *American Journal of Public Health*, 83, 215-219.
- Chassin, L., Presson, C. C., Pitts, S. C., & Sherman, S. J. (2000). The natural history of cigarette smoking from adolescence to adulthood in a Midwestern community.

- sample: multiple trajectories and their psychosocial correlates. *Health Psychology*, 19, 223-231.
- Chassin, L., Presson, C. C., & Sherman, S. J. (1984). Cognitive and social influence factors in adolescent smoking cessation. *Addictive Behaviors*, 9, 383-390.
- Chassin, L., Presson, C. C., Sherman, S. J., & Edwards, D. A. (1991). Four pathways to young-adult smoking status: adolescent social-psychological antecedents in a Midwestern community sample. *Health Psychology*, 10, 409-418.
- Ciaidini, R. B. (1993). *Influence: Science and practice*. New York, NY: Harper Collins.
- Collins, L. M., Sussman, S., Rauch, J. M., Dent, C. W., Johnson, C., Hansen W. B., & Flay, B. R. (1987). Psychosocial predictors of young adolescent cigarette smoking: a sixteen-month three-wave longitudinal study. *Journal of Applied Social Psychology*, 17, 554-573.
- Crowe, J. W., Jorjol, M. R., & Nakomkhet, N. (1994). Cross-cultural study of samples of adolescent attitudes, knowledge, and behaviors related to smoking. *Psychological Reports*, 75, 1155-1161.
- Curry, S., Grothaus, L. C., & Wagner, E. H. (1990). Intrinsic and extrinsic motivation for smoking cessation. *Journal of Consulting and Clinical Psychology*, 58, 310-316.
- Deppen, A., Schwartz, R. H., & O'Donnell, R. (1996). A survey of adolescent smoking patterns. *Journal of the American Board of Family Practice*, 9, 7-13.

produced by RJR TC

HEALTHY LIVING

BEST
COPY

Dawley, H. H., Fleischer, B. J., & Dawley, L. T. (1985). Attitudes toward smoking and smoking rate: implications for smoking discouragement. International Journal of the Addictions, 20, 483-488.

Dozois, D. N., Farrow, J. A., & Mieser, A. (1995). Smoking patterns and cessation motivations during adolescence. International Journal of the Addictions, 30, 1485-1498.

Duncan, C. L., Cummings, S. R., Hudes, E. S., Zahnd, E., & Coates, T. J. (1992). Quitting smoking: reasons for quitting and predictors of cessation among medical patients. Journal of General Internal Medicine, 7, 398-404.

Eagly, A. H., & Chaiken, S. (1975). An attributional analysis of the effect of communicator characteristics on opinion change: The case of communicator attractiveness. Journal of Personality and Social Psychology, 32, 136-144.

Eagly, A. H., Wood, W., Chaiken, S. (1978). Causal inferences about communicators and their effect on opinion change. Journal of Personality and Social Psychology, 36, 424-435.

Eagly, A. H., Chaiken, S., & Wood, W. (1981). An attributional analysis of persuasion. In J. Harvey, W. Ickes, & R. Kidd (Eds.), New directions in attribution research (Vol. 3). Hillsdale, NJ: Erlbaum.

Eiser, J. R., Reicher, S. D., & Podpadec, T. J. (1995). Smokers' and non-smokers' estimates of their personal risk of cancer and of the incremental risk attributable to cigarette smoking. Addiction Research, 3, 221-229.

Eiser, J. R., Sutton, S. R., & Wober, M. (1979). Smoking, seat-belts, and beliefs about health. Addictive Behaviors, 4, 331-338.

BEST
COPY

Feather, N. T. (1962). Cigarette smoking and lung cancer: A study of cognitive dissonance. Australian Journal of Psychology, 14, 55-64.

Feather, N. T. (1963). Cognitive dissonance, sensitivity, and evaluation. Journal of Abnormal and Social Psychology, 66, 157-163.

Festinger, L. (1957). A theory of cognitive dissonance. Stanford, CA: Stanford University Press.

Finkel, S. E. (1995). Causal analysis with panel data. Thousand Oaks, CA: Sage.

Fodor, J. T., Glass, L. H., & Weiner, J. M. (1968). Smoking behavior, cognitive skills and educational implications. Journal of School Health, 38, 94-98.

Gerard, M., Gibbons, F. X., Benfante, A. C., & Hessling, R. M. (1996). A longitudinal study of the reciprocal nature of risk behaviors and cognitions in adolescents: What you do shapes what you think, and vice versa. Health Psychology, 15, 344-354.

Greening, L., & Dollinger, S. J. (1991). Adolescent smoking and perceived vulnerability to smoking-related causes of death. Journal of Pediatric Psychology, 16, 687-699.

Greenlund, K. J., Johnson, C. C., Webber, L. S., & Berenson, G. S. (1997). Cigarette smoking attitudes and first use among third-through sixth-grade students: the Bogalusa heart study. American Journal of Public Health, 87, 1345-1348.

Gronhaug, K., & Kangun, N. (1979). Exploring generalized and personalized beliefs among smokers and non-smokers: a first look. Advances in Consumer Research, 6, 184-190.

- Grube, J. W., McGree, S., & Morgan, M. (1986). Beliefs related to cigarette smoking among Irish college students. *International Journal of the Addictions*, 21, 701-706.
- Haga, D., Gillis, M. M., & McDermut, W. (1993). Lay beliefs about the causes and consequences of smoking cessation maintenance. *International Journal of the Addictions*, 28, 369-375.
- Halpern, M. T., & Warner, K. E. (1993). Motivations for smoking cessation: a comparison of successful quitters and failures. *Journal of Substance Abuse*, 5, 247-256.
- Halpern, M. T., & Warner, K. E. (1994). Differences in former smokers' beliefs and health status following smoking cessation. *American Journal of Preventive Medicine*, 10, 31-37.
- Hansen, W. B., & Malotte, C. K. (1986). Perceived personal immunity: the development of beliefs about susceptibility to the consequences of smoking. *Preventive Medicine*, 15, 363-373.
- Harrison, A., Gassool, A., Suweidi, E., Sabat, K. K., Al-Mansouri, K., Al-Darmaki, M., Al-Masboudi, M., & Al-Taire, Y. (1996). The reactions of patients and doctors in the United Arab Emirates towards smoking. *Journal of Addictive Diseases*, 15, 75-92.
- Hill, D., & Gray, M. (1984). Australian patterns of tobacco smoking and health related beliefs in 1983. *Community Health Studies*, 8, 307-316.
- Holbrook, A. L., Krosnick, J. A., Carson, R. T., & Mitchell, R. C. (2000). Violating conversational conventions disrupts cognitive processing of attitude questions. *Journal of Experimental Social Psychology*, 36, 465-494.

BEST
COPY

Hurd, M. D., McGarry, K. (1995). Evaluation of the subjective probabilities of survival in the health and retirement study. Journal of Human Resources, 30, 268-292.

Kahn, E. B., & Edwards, C. N. (1970). Smoking and youth: contributions to the study of smoking behavior in high school students. Journal of School Health, 40, 561-562.

Kaufert, J. M., Rabkin, S. W., Syrotuk, J., Boyko, E., & Shane, F. (1986). Health beliefs as predictors of success of alternate modalities of smoking cessation: Results of a controlled trial. Journal of Behavioral Medicine, 9, 475-489.

Kelson, S. R., Puffella, J. L., Otterland, A. (1975). A survey of smoking habits and attitudes toward smoking among students in grades 7 through 12 in Toledo and Lucas County (Ohio) public schools-1964 and 1971. American Journal of Public Health, 65, 923-938.

Kessler, R. C., & Greenberg, D. F. (1981). Linear panel analysis: Models of quantitative change. New York: Academic Press.

Klesges, R. C., Somes, G., Pascale, R. W., Klesges, L. M., Murphy, M., Brown, K., & Williams, E. (1988a). Knowledge and beliefs regarding the consequences of cigarette smoking and their relationships to smoking status in a biracial sample. Health Psychology, 7, 387-401.

Krosnick, J. A., & Fabrigar, L. R. (forthcoming). Designing great questionnaires: Insights from psychology. New York: Oxford University Press.

Lawton, M. P., & Goldman, A. E. (1961). Cigarette smoking and attitude toward the etiology of lung cancer. Journal of Social Psychology, 54, 235-248.

- Lee, C. (1989). Perceptions of immunity to disease in adult smokers. *Journal of Behavioral Medicine*, 12, 267-277.
- Lee, C., & McMaster, C. (1991). Cognitive dissonance in tobacco smokers. *Addictive Behaviors*, 16, 349-353.
- Leventhal, H., Glynn, K., & Fleming, R. (1987). Effect of smoking risk factors on smoking beliefs. *Journal of the American Medical Association*, 257, 3373-3376.
- Levin, E. E. (1991). Reasons for smoking and not smoking given by school children. *Journal of School Health*, 41, 101-105.
- Levin, E. E., & Edwards, J. A. (1970). A multivariate study of correlative factors in youthful cigarette smoking. *Developmental Psychology*, 2, 5-11.
- Lichtenstein, E., & Cohen, S. (1990). Prospective analysis of two modes of unaided smoking cessation. *Health Education Research*, 5, 63-72.
- Marken, B. (1982). Heavy smokers, light smokers, and nonsmokers' beliefs about cigarette smoking. *Journal of Applied Psychology*, 67, 616-622.
- Marshall, P. (1990). "Just one more..." A study into the smoking attitudes and behavior of patients following first Myocardial Infarction. *International Journal of Nursing Studies*, 27, 375-387.
- Mausner, J. S., & Bahn, J. K. (1974). *Epidemiology: An introductory text*. Philadelphia: Saunders.
- McCoy, S., Gibbons, F. X., Rea, T. J., Gerrard, M., Lusa, C. A., & Sufice, A. (1992). Perceptions of smoking risk as a function of smoking status. *Journal of Behavioral Medicine*, 15, 469-488.

Produced by RJRTD

BEST
COPY

McKenna, F. P., Warburton, D. M., & Winwood, M. (1993). Exploring the limits of optimism: the case of smokers' decision making. British Journal of Psychology, 84, 389-394.

McMaster, C., & Lee, C. (1991). Cognitive dissonance in tobacco smokers. Addictive behaviors, 16, 349-353.

Mettlin, C. (1973). Smoking as behavior: applying a social psychological theory. Journal of Health and Social Behavior, 14, 144-152.

Murray, D. M., Prokhorov, A. V., & Harty, K. C. (1994). Effects of a statewide antismoking campaign on mass media messages and smoking beliefs. Preventive Medicine, 23, 54-60.

Murray, M., & Craknell, A. (1980). Adolescents' views on smoking. Journal of Psychosomatic Research, 24, 243-251.

Murray, M., Swam, A. V., Johnson, M. R. D., & Bewley, B. R. (1983). Some factor associated with increased risk of smoking by children. Journal of Child Psychology and Psychiatry and Allied Disciplines, 24, 223-232.

Pervin, L. A., & Yanko, R. J. (1965). Cigarette smoking and alternative methods of reducing dissonance. Journal of Personality and Social Psychology, 2, 30-36.

Petty, R. E., & Krosnick, J. A. (1995). Attitude strength: Antecedents and consequences. Mahwah, NJ: Erlbaum.

Presson, C. C., Chassin, L., Sherman, S., Olshavsky, R., Bensenberg, M., & Corty, E. (1984). Predictors of adolescents' intentions to smoke: age, sex, race, and regional differences. International Journal of the Addictions, 19, 504-519.

- Pyke, D. A. (1955). Cigarette smoking and bronchial carcinoma: Effect of the association upon smoking habits of a group of doctors. *British Medical Journal*, 1, 1115-1116.
- Reppucci, J. D., Revenson, T. A., Aber, M., & Reppucci, N. D. (1991). Unrealistic optimism among adolescent smokers and nonsmokers. *Journal of Primary Prevention*, 11, 227-236.
- Roper Organization, Inc. (1978). A study of public attitudes toward cigarette smoking and the tobacco industry in 1978. New York, NY: The Roper Organization.
- Rose, J. S., Chassin, L., Presson, C. C., & Sherman, S. J. (1990). Prospective predictors of quit attempts and smoking cessation in young adults. *Health Psychology*, 15, 261-268.
- Rosenthal, R., & Rubin, D. B. (1978). Interpersonal expectancy effects: The first 345 studies. *Behavioral and Brain Sciences*, 1, 377-415.
- Rudolph, J. P., & Borsland, B. L. (1976). Factors affecting the incidence and acceptance of cigarette smoking among high school students. *Adolescence*, 11, 519-525.
- Saad, L., & O'Brien, S. (1998). The tobacco industry summons polls to the witness stand: A review of public opinion on the risks of smoking. Paper presented at the annual meeting of the American Association for Public Opinion Research, St. Louis, MO.
- Salber, E., Reed, R. B., Harrison, S. V., & Green, J. H. (1963). Smoking behavior, recreational activities and attitudes toward smoking among newton secondary school children. *Pediatrics*, 33, 911-918.

- Schneider, F. W., & Vannestrigt, L. A. (1974). Adolescent-preadolescent differences in beliefs and attitudes about cigarette smoking. *Journal of Psychology*, 82, 71-81.
- Schneider, S. J. (1984). Who quits smoking in a behavioral treatment program? *Addictive Behaviors*, 9, 373-381.
- Schoenbaum, M. (1997). Do smokers understand the mortality effects of smoking? Evidence from the health and retirement survey. *American Journal of Public Health*, 87, 755-759.
- Slovic, P. (1998). Do adolescent smokers know the risks? *Duke Law Journal*, 47, 1233-1241.
- Slovic, P. (2000). What does it mean to know a cumulative risks? Adolescents' perceptions of short-term and long-term consequences of smoking. *Journal of Behavioral Decision Making*, 13, 259-266.
- Stacy, R. D., Green, D. L., Haas, S., & Hellbusch, J. (1994). Beliefs of pregnant women about smoking and maternal and infant health. *Health Values*, 18, 13-18.
- Stepoe, A., Vanden, J., Smith, H., Kopp, M., Strabel, A., Vlack, J., & Zott, A. M. (1995). Tobacco smoking in young adults from 21 European countries: association with attitudes and risk awareness. *Addiction*, 90, 571-582.
- Stone, S. L., & Kristeller, J. L. (1992). Attitudes of adolescents toward smoking cessation. *American Journal of Preventive Medicine*, 8, 221-225.
- Strecher, V. J., Kreuter, M. W., & Kobrin, S. C. (1994). Do cigarette smokers have unrealistic perceptions of their heart attack, cancer, and stroke risks? *Journal of Behavioral Medicine*, 18, 45-54.

Swenson, I., & Dalton, J. A. (1983). Reasons for smoking cessation among a random sample of North Carolina nurses. Women and Health, 8, 33-41.

Swinchart, J. W. (1966). Changes over time in student reactions to the surgeon general's report on smoking and health. American Journal of Public Health, 56, 2023-2027.

Tipton, R. M. (1988). The effects of beliefs about smoking and health on smoking cessation. Journal of Psychology, 122, 313-321.

Tipton, T. M., & Richsane, W. E. (1987). Beliefs about smoking and health: their measurement and relationship to smoking behavior. Addictive Behaviors, 12, 217-223.

Urberg, K., & Robbins, R. (1984). Perceived vulnerability in adolescents to the health consequences of cigarette smoking. Preventive Medicine, 13, 367-376.

Virgile, M., Owen, N., Severson, H. H. (1991). Adolescents' smoking behavior and risk perceptions. Journal of Substance Abuse, 3, 315-324.

Viscusi, W. K. (1992). Smoking: Making the risky decision. New York: Oxford University Press.

Walster, E., Aronson, E., & Abrahams, D. (1966). On increasing the persuasiveness of a low prestige communicator. Journal of Experimental Social Psychology, 2, 325-342.

Wang, M. Q., Fitzhugh, W. C., Cowdery, J. W., & Trucks, J. (1995). Developmental influences of attitudes and beliefs on adolescents smoking. Psychological Reports, 76, 399-402.

- Wang, M. Q., Fitzhugh, W. C., Eddy, J. M., & Westerfield, R. C. (1998). School dropouts' attitudes and beliefs about smoking. *Psychological Reports*, 82, 984-986.
- Warner, K. E. (1977). The effects of the anti-smoking campaign on cigarette consumption. *American Journal of Public Health*, 67, 645-650.
- Warner, K. E. (1981). Cigarette smoking in the 1970's: The impact of the anti-smoking campaign on consumption. *Science*, 211, 729-731.
- Warner, K. E. (1989). Effects of the anti-smoking campaign: An update. *American Journal of Public Health*, 79, 144-151.
- Warner, K. E., Hargrett, M. T., & Giovino, G. A. (1994). Differences by education in smoker/non-smoker beliefs about the dangers of smoking. *Health Education Research*, 9, 139-143.
- Warner, K. E., & Maurer, H. A. (1982). Impact of the anti-smoking campaign on smoking prevalence: A cohort analysis. *Journal of Public Health Policy*, 3, 374-390.
- Weinstein, N. D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39, 806-820.
- Weinstein, N. D. (1982). Unrealistic optimism about susceptibility to health problems. *Journal of Behavioral Medicine*, 5, 441-460.
- Weinstein, N. D. (1987). Unrealistic optimism about susceptibility to health problems: conclusions from a community-wide sample. *Journal of Behavioral Medicine*, 10, 481-500.
- Weinstein, N. D. (1998). Accuracy of smokers' risk perceptions. *Annals of Behavioral Medicine*, 20, 135-140.

Produced by RJP/TC in

HUMPHREY

17, 967-978.

Variables associated with smoking behavior in a college sample. *Psychological Reports*.

Zagora, S. V., & Zurcher, L. A. (1965). An analysis of some psycho-social

Australian Journal of Psychology, 106-112.

Williams, T., & Clarke, V. A. (1997). Optimistic bias in beliefs about smoking.

Survey research, polling, and data analysis. Thousand Oaks, CA: Sage

Weisberg, H. F., Krosnick, J. A., & Bower, B. D. (1996). *An introduction to*

Table 1:

Coders' Judgments of Answers Given by EBCBS Survey Deponents:

Deponents' Beliefs About the Health Effects and Addictiveness of Cigarette Smoking at
the Time of Smoking Onset

Coding Question	% Yes	% No	% DK
1. At the time that the person became a regular cigarette smoker, did he/she believe that smoking cigarettes increased people's chances of getting lung cancer or emphysema or heart disease or any other serious disease?	20%	77%	3%
2. At the time that the person became a regular cigarette smoker, did he/she believe that smoking cigarettes increased his/her own chances of getting lung cancer or emphysema or heart disease or any other serious disease?	4%	92%	3%
3. At the time that the person became a regular cigarette smoker, did he/she believe that smoking cigarettes was addictive for people?	8%	42%	50%
4. At the time the person became a regular cigarette smoker, did he/she believe that he/she would become addicted to smoking cigarettes?	3%	87%	11%

JAN 22 2001 11:57 PM FR DEWEY BALLPNTINE LLP \$9 6303 TO 902916#8559497#12 P.68

52434 5657

BEST
COPY

Table 2:

Coders' Judgments of Answers Given by EBCBS Survey Deponents:

Deponents' Beliefs About the Health Effects and Addictiveness of Cigarette Smoking
After They Had Become Regular Smokers

Coding Question	% Yes	% No	% DK
2. At any other time that the person was smoking cigarettes regularly, did he/she believe that smoking cigarettes increased people's chances of getting lung cancer or emphysema or heart disease or any other serious disease?	84%	11%	5%
4. At any other time that the person was smoking cigarettes regularly, did he/she believe that smoking cigarettes increased his/her own chances of getting lung cancer or emphysema or heart disease or any other serious disease?	63%	28%	8%
6. At any other time that the person was smoking cigarettes regularly, did he/she believe that smoking cigarettes was addictive for people?	79%	4%	17%
8. At any other time that the person was smoking cigarettes regularly, did he/she believe that he/she was personally addicted to smoking cigarettes?	76%	14%	10%
18. At any time, did the person know the name of a specific cancer-causing substance (also called a carcinogen) that is in tobacco or cigarette smoke?	16%	65%	19%

JAN 22 2001 11:57 PM FR DEWEY BALLANTINE LLP 59 6000 TO 90291:6#659497412 P.69

52434 5658

Table 3:

Coders' Judgments of Answers Given by EBCBS Survey Deponents:

Deponents' Beliefs About their Exposure to Statements by Tobacco Companies

Coding Question	% Yes	% No	% DK
9. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes increases a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease?	6%	93%	1%
10. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes does not increase a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease?	37%	44%	19%
11. Did the person ever hear, or hear about, any statement by any tobacco company that the scientific evidence is inconclusive as to whether or not smoking cigarettes increases a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease?	43%	42%	15%
19. Did the person ever hear, or hear about, any statement by any tobacco company naming a specific cancer-causing substance (also called a carcinogen) that is in tobacco or cigarette smoke?	3%	87%	10%
12. Did the person ever hear, or hear about, any statement by any tobacco company about whether or not smoking cigarettes is addictive?	15%	58%	27%
13. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes is not addictive?	12%	54%	34%
14. Did the person ever hear, or hear about, any statement by any tobacco company that the scientific evidence regarding the addictiveness of smoking cigarettes is inconclusive?	4%	4%	92%
15. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes is addictive?	3%	87%	10%

JAN 22 2001 11:57 PM FR DEMEV BALLANTINE LLP.S9 6033 TO 9029161859497412 P.70

52434 5659

BEST COPY

Table 4:

Coders' Judgments of Answers Given by EBCBS Survey Deponents:

Deponents' Beliefs About Whether They Would Have Been Influenced by Statements by Tobacco Companies

Coding Question	% Yes	% No	% DK
16. If any tobacco company had stated publicly that smoking cigarettes increases a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease, would that have caused the person to not start smoking cigarettes at all, to quit, to quit sooner than he/she did, or to try to quit?	75%	16%	9%
17. If any tobacco company had stated publicly that smoking cigarettes is addictive, would that have caused the person to not start smoking cigarettes at all, to quit, to quit sooner than he/she did, or to try to quit?	62%	10%	29%
20. If any tobacco company had stated publicly the name of a cancer-causing substance that is in tobacco or cigarette smoke, would that have caused the person to not start smoking cigarettes at all, to quit, to quit sooner than he/she did, or to try to quit?	74%	13%	13%

JAN 22 2001 11:57 PM FR DELIVERY BALLANTINE LLP 59 6233 TO 902916#659497#12 P. 71

52434 5660

BEST
COPY

Table 5:
Perceived Numbers of Non-Smokers and Smokers Who Will Get Lung Cancer

Number of People Who Would Get Lung Cancer	Out of 1,000 Non-Smokers	Out of 1,000 Smokers
0-50	41.2%	12.3%
51-100	18.1%	8.4%
101-150	2.3%	2.3%
151-200	7.3%	6.4%
201-250	4.8%	3.3%
251-300	4.4%	6.0%
301-350	1.2%	1.9%
351-400	1.9%	6.2%
401-450	0.1%	1.4%
451-499	0.0%	0.0%
500	13.4%	21.4%
501-550	0.0%	0.3%
551-600	0.9%	4.8%
601-650	0.3%	1.4%
651-700	0.9%	5.4%
701-750	0.7%	3.4%
751-800	1.0%	6.3%
801-850	0.0%	0.6%
851-900	0.5%	3.3%
901-950	0.0%	0.5%
951-1,000	0.8%	4.3%
Total	100.0%	100.0%
Mean	188.2	433.5
Median	100.0	500.0
N	1,916	1,936

JAN 22 2001 11:58 PM FR DEWEY BALLANTINE LLP.59 6333 TO 902816H59497#12 P.72

52434 5661

Table 6:
Perceived Relative Risk of Getting Lung Cancer from Cigarette Smoking

Relative Risk	Percent of Respondents	Cumulative Percentage
0.00-0.99	5.7%	5.7%
1.0	11.6%	17.2%
1.01-1.99	17.3%	34.5%
2.00-2.99	16.0%	50.5%
3.00-3.99	6.4%	56.9%
4.00-4.99	4.8%	61.7%
5.00-5.99	5.7%	67.4%
6.00-6.99	2.2%	69.6%
7.00-7.99	2.5%	72.1%
8.00-8.99	1.9%	74.0%
9.00-9.99	0.9%	74.8%
10.00-10.99	4.8%	79.6%
11.00-11.99	0.2%	79.8%
12.00-12.99	0.8%	80.6%
13.00-13.99	0.6%	81.2%
14.00-14.99	0.3%	81.4%
15.00-15.99	1.2%	82.7%
16.00-16.99	1.0%	83.7%
17.00-17.99	0.3%	83.9%
18.00-18.99	0.4%	84.4%
19.00-19.99	0.0%	84.4%
20.00-29.99	3.4%	87.8%
30.00-49.00	2.4%	90.2%
50.00-79.00	3.3%	93.5%
80.00-100.00	6.5%	100.0%
Total	100.0%	
Mean	29.7	
Median	2.8	
N	1,905	

HUMPHREY

Produced by BIRTC

52434 5663

JAN 22 2001 11:58 PM FR DEWEY BALLANTINE LLP.59 6303 TO 9029160659497#12 P.74

produced by RJRTC
in

HUMPHREY

JON A. KROSCH, PH.D.

CURRICULUM VITAE

APPENDIX A

0012

A & F FAX CTR DC RR

00-08-01 20:20 FAX 707 842 0880

BEST
COPY

**BEST
COPY**CURRICULUM VITAE

Jon A. Krosnick

Home Address [DELETED]Office Address Department of Psychology
The Ohio State University
108 Lazenby Hall
1827 Neil Avenue
Columbus, Ohio 43210
(614) 292-3496E-mail: [DELETED]
Fax: (614) 292-5601Education A.B., Harvard University (in Psychology, Magna Cum Laude), 1980.
M.A., University of Michigan (in Social Psychology, with Honors), 1983.
Ph.D., University of Michigan (in Social Psychology), 1986.Employment

1986-present Assistant to Associate to Full Professor, Departments of Psychology and Political Science, The Ohio State University.

1987-1989 Adjunct Research Investigator, Survey Research Center, Institute for Social Research, University of Michigan.

1987-1989 Lecturer, Survey Research Center Summer Program in Survey Research Techniques, University of Michigan.

1986-1987 Visiting Scholar, Survey Research Center, Institute for Social Research, University of Michigan.

1985 Lecturer, Department of Psychology, The Ohio State University.

1982-1985 Research Assistant, Center for Political Studies and Survey Research Center, Institute for Social Research, University of Michigan.

1980-1981 Senior Research Assistant, Department of Psychology, Harvard University.

JAN 22 2001 11:58 PM FR DEXBY BULLNTINE LLP:SB 6503 TO 902916#B59497#12 P.75

52434 5664

BEST
COPY

2

1979-1981 Senior Research Assistant, Department of Behavioral Sciences, School of Public Health, Harvard University.

Honors

1984 Phillip Brickman Memorial Prize for Research in Social Psychology.

1984 American Association for Public Opinion Research Student Paper Award.

1984 Pi Sigma Alpha Award for the Best Paper Presented at the 1983 Midwest Political Science Association Annual Meeting.

1984 Elected Departmental Associate, Department of Psychology, University of Michigan, signifying outstanding academic achievement.

1990 Invited Guest Editor, Social Cognition (Special issue on political psychology, Vol. 8, #1, May)

1992 Invited Address, Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

1993 Birmingham Visiting Scholar, University of Wisconsin.

1995 Erik H. Erikson Early Career Award for Excellence and Creativity in the Field of Political Psychology, International Society of Political Psychology.

1996-1997 Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford, California.

1998 Elected Fellow, American Psychological Association and Society for Personality and Social Psychology.

1998 Elected Fellow, American Psychological Society.

2001-2003 University Fellow, Resources for the Future, Washington, DC.

Editorial Board Member

1989- Journal of Personality and Social Psychology

1990-1994 Journal of Experimental Social Psychology

1997- Basic and Applied Social Psychology

JAN 22 2001 11:58 PM FR DEWEY BALLANTINE LLP 59 6333 TO 902916#659497#12 P.75

52434 5665

Media Psychology

BEST COPY

- College of Social and Behavioral Sciences, Ohio State University, to support research on questionnaire design.
- Mechon Center, Ohio State University. Foreign policy and election outcomes: A proposal to study the 2000 American Presidential election.
- Patented Grants and Contracts**
- 1995
CBS Research Grant, to support development and evaluation of a mass media promotional campaign for sound recordings.
- 1984
Society for the Psychological Study of Social Issues Doctoral Dissertation Grant-in-aid.
- 1983
CBS Research Grant, to support literature review/research on the causes of heavy television viewing among children and adolescents.
- 1985
CBS Research Grant, to support empirical research on the effect of television viewing on alcohol use among children and adolescents.
- 1985
CBS Research Grant, to support empirical research on the causes of heavy television viewing among children and adolescents.
- 1987-1989
National Institute on Aging Research Grant, to study changes in political orientations over the life span (co-investigator with Duane F. Alwin).
- 1987
National Association of Broadcasters Research Grant, to study the causes of heavy television viewing among children and adolescents.
- 1988
Society for the Psychological Study of Social Issues Grant-in-Aid, to support research on the causes of heavy television viewing among children and adolescents.
- 1990-1992
National Science Foundation, The information processing consequences of attitude importance.
- 1991
National Science Foundation Research Experience for Undergraduates Grant Supplement, The information processing consequences of attitude importance.
- 1992
Society for the Psychological Study of Social Issues Grant-in-Aid, to support research on the impact of the Gulf War on the constituents of presidential evaluations.
- 1993
National Science Foundation Research Experience for Undergraduates Grant Supplement, The information processing consequences of attitude importance.

1995
2000
1984
1983
1985
1985
1987-1989
1988
1990-1992
1991
1992
1993

JAN 22 2001 11:59 AM FR DEWEY BALLANTINE LLP 59 6333 TO 982916H59596286 P.79

- 1994 National Science Foundation, Explaining the surprising accuracy of mail surveys.
- 1995 National Science Foundation Research Experience for Undergraduates Grant Supplement, Explaining the surprising accuracy of mail surveys.
- 1995 U.S. Department of the Interior/Minerals Management Service/University of California Coastal Marine Institute, Testing and calibrating the measurement of oceanic values for oil spills via the contingent valuation method (co-investigator with Michael Hansmann).
- 1995 Electric Power Research Institute/Industrial Economics, Elicitation of public perceptions regarding the potential ecological effects of climate change (part I).
- 1996 Electric Power Research Institute/Industrial Economics, Elicitation of public perceptions regarding the potential ecological effects of climate change (part II).
- 1997 National Science Foundation, Formation and change of public beliefs about global warming.
- 1997 National Oceanic and Atmospheric Administration/U.S. Environmental Protection Agency/Research for the Future, Formation and change of public beliefs about global warming: Wave II of survey interviewing.
- 1998 Robert Dodd and Associates/The Battelle Memorial Institute/National Aeronautics and Space Administration, National aviation operational monitoring system questionnaire development.
- 1998 Resources for the future, American public opinion on the environment.
- 1982-1984 National Institute of Mental Health Graduate Training Fellowships.
- 1990 Krosnick, J. A. (Ed.), (1990), *Thinking about politics: Commentaries of experts and novices*, New York: Guilford Press (Book version of a special issue of *Social Cognition*, Volume 8, Number 1, 1990).
- Petty, R. E., & Krosnick, J. A. (Eds.), (1995), *Attitude strength: Antecedents and consequences*, Hillsdale, NJ: Erlbaum.

BEST
COPY

Weisberg, H., Krosnick, J. A., & Bowen, B. (1996). Introduction to survey research, polling, and data analysis. Thousand Oaks, CA: Sage.

Krosnick, J. A., & Fabrigar, L. R. (in press). Designing great questionnaires: Insights from psychology. New York: Oxford University Press.

Carson, R. T., Conaway, M. B., Hanemann, W. M., Krosnick, J. A., Martin, K. M., McCubbin, D. R., Mitchell, R. C., Prosser, S. (in press). Valuing oil spill prevention: A case study of California's central coast. Norwell, MA: Kluwer Academic Publishers.

Journal Articles and Book Chapters

Judd, C. M., Krosnick, J. A., & Milburn, M. A. (1981). Political involvement and attitude structure in the general public. American Sociological Review, 46, 660-669.

Krosnick, J. A., & Judd, C. M. (1982). Changes in social influence at adolescence: Who induces cigarette smoking? Developmental Psychology, 18, 359-368.

Judd, C. M., & Krosnick, J. A. (1982). Attitude centrality, organization, and measurement. Journal of Personality and Social Psychology, 42, 436-447.

Judd, C. M., Kenny, D. A., & Krosnick, J. A. (1983). Judging the positions of political candidates: Models of assimilation and contrast. Journal of Personality and Social Psychology, 44, 952-963.

McAllister, A. L., Krosnick, J. A., & Milburn, M. A. (1984). Causes of adolescent cigarette smoking: Tests of a structural equation model. Social Psychology Quarterly, 47, 24-36.

Iyengar, S., Kinder, D. R., Peters, M. D., & Krosnick, J. A. (1984). The evening news and presidential evaluations. Journal of Personality and Social Psychology, 46, 778-787.

Reprinted in Peplau, L. A., Sears, D. O., Taylor, S. E., & Freedman, J. L. (Eds.) (1988), Readings in social psychology: Classic and contemporary contributions. Englewood Cliffs, NJ: Prentice Hall.

Alwin, D. F., & Krosnick, J. A. (1985). The measurement of values in surveys: A comparison of ratings and rankings. Public Opinion Quarterly, 49, 535-552.

Reprinted in Singer, E., & Prosser, S. (Eds.) (1989), Survey research methods: A reader. Chicago: University of Chicago Press.

Schuman, H., Ludwig, J., & Krosnick, J. A. (1986). The perceived threat of nuclear war, salience, and open questions. Public Opinion Quarterly, 50, 519-536.

Krosnick, J. A., & Alwin, D. F. (1987). An evaluation of a cognitive theory of response order effects in survey measurement. Public Opinion Quarterly, 51, 201-219.

Krosnick, J. A. (1988). Attitude importance and attitude change. Journal of Experimental Social Psychology, 24, 240-255.

Krosnick, J. A., & Schuman, H. (1988). Attitude intensity, importance, and certainty and susceptibility to response effects. Journal of Personality and Social Psychology, 54, 940-952.

Krosnick, J. A. (1988). The role of attitude importance in social evaluation: A study of policy preferences, presidential candidate evaluations, and voting behavior. Journal of Personality and Social Psychology, 55, 196-210.

Krosnick, J. A., & Alwin, D. F. (1988). A test of the form-resistant correlation hypothesis: Ratings, rankings, and the measurement of values. Public Opinion Quarterly, 52, 526-538.

Judd, C. M., & Krosnick, J. A. (1989). The structural bases of consistency among political attitudes: The effects of political expertise and attitude importance. In A. R. Pratkanis, S. J. Breckler, & A. G. Greenwald (Eds.), Attitude Structure and Function. Hillsdale, NJ: Erlbaum.

Krosnick, J. A. (1989). Attitude importance and attitude accessibility. Personality and Social Psychology Bulletin, 15, 297-308.

Krosnick, J. A. (1989). Question wording and reports of survey results: The case of Louis Harris and Associates and Caspary. Public Opinion Quarterly, 53, 107-113.

Krosnick, J. A., & Alwin, D. F. (1989). Aging and susceptibility to attitude change. Journal of Personality and Social Psychology, 57, 416-425.

Krosnick, J. A. (1990). Government policy and citizen passion: A study of issue publics in contemporary America. Political Behavior, 12, 59-92.

Krosnick, J. A. (1990). Conceptions of expertise in political psychology. Social Cognition, 8, 1-8. (also in J. Krosnick (Ed.), Thinking about politics: Comparisons of experts and novices. New York: Guilford, 1990, pp. 1-8).

Krosnick, J. A. (1990). Lessons learned: A review and integration of our findings. Social Cognition, 8, 154-158. (also in J. Krosnick (Ed.), Thinking about politics: Comparisons of experts and novices. New York: Guilford, 1990, pp. 154-158).

Krosnick, J. A., Li, F., & Lehman, D. (1990). Conversational conventions, order of information acquisition, and the effect of base rates and individuating information on social judgments. Journal of Personality and Social Psychology, 59, 1140-1152.

- Krosnick, J. A., & Milburn, M. A. (1990). Psychological determinants of political opinionation. *Social Cognition*, 8, 49-72. (also in J. Krosnick (Ed.), *Thinking about politics: Comparisons of experts and novices*. New York: Guilford, 1990, pp. 49-72).
- Krosnick, J. A., & Sedulades, C. (1990). Self-monitoring and self-protective biases in the use of consensus information to predict one's own behavior. *Journal of Personality and Social Psychology*, 58, 718-728.
- Krosnick, J. A., & Kinder, D. R. (1990). Alienating popular support for the president through priming: The Iran-Contra affair. *American Political Science Review*, 84, 497-512.
- Alwin, D. F., & Krosnick, J. A. (1991). Aging, cohort stability, and socio-political orientations over the lifecourse. *American Journal of Sociology*, 97, 169-195.
- Alwin, D. F., & Krosnick, J. A. (1991). The reliability of attitudinal survey data: The effects of question and respondent characteristics. *Sociological Methods and Research*, 20, 139-181.
- Judd, C. M., Drake, R. A., Bauman, J. W., & Krosnick, J. A. (1991). Some dynamic properties of attitude structures: Context induced response facilitation and polarization. *Journal of Personality and Social Psychology*, 60, 193-202.
- Krosnick, J. A. (1991). Attitudinal perceptions of presidential candidates: A test of the projection hypothesis. *Journal of Social Issues*, 46, 159-182.
- Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, 5, 213-236.
- Krosnick, J. A. (1991). The stability of political preferences: Comparisons of symbolic and non-symbolic attitudes. *American Journal of Political Science*, 35, 547-576.
- Krosnick, J. A. (1992). The impact of cognitive sophistication and attitude importance on response order effects and question order effects. In N. Schwarz and S. Sudman (Eds.), *Order effects in social and psychological research* (pp. 203-218). New York: Springer-Verlag.
- Krosnick, J. A., & Abelson, R. P. (1992). The case for measuring attitude strength in surveys. Pp. 177-203 in J. Tausch (Ed.), *Questions about questions: Inquiries into the cognitive bases of surveys*. New York: Russell Sage.
- Krosnick, J. A., Betz, A. L., Jussim, L. J., & Lynn, A. R. (1992). Subliminal conditioning of attitudes. *Personality and Social Psychology Bulletin*, 18, 152-162.
- Lehman, D. R., Krosnick, J. A., West, R. L., & Li, F. (1992). The focus of judgment effect: A question wording effect due to hypothesis confirmation bias. *Personality and Social Psychology Bulletin*, 18, 690-699.

- Krosnick, J. A., & Berent, M. K. (1993). Comparisons of party identification and policy preferences: The impact of survey question format. *American Journal of Political Science*, 37, 941-964.
- Krosnick, J. A., & Brannon, L. A. (1993). The impact of the Gulf War on the ingredients of presidential evaluations: Multidimensional effects of political involvement. *American Political Science Review*, 87, 963-975.
- Krosnick, J. A., & Brannon, L. A. (1993). News media influence on the foundations of popular support for the president: George Bush and the Gulf conflict. *Journal of Social Issues*, 49, 167-182.
- Krosnick, J. A., Boninger, D. S., Chuang, Y. C., Berent, M. K., & Carnot, C. G. (1993). Attitude strength: One construct or many related constructs? *Journal of Personality and Social Psychology*, 65, 1132-1149.
- Krosnick, J. A., Berent, M. K., & Boninger, D. S. (1994). Pockets of responsibility in the American electorate: Findings of a research program on attitude importance. *Political Communication*, 11, 389-409.
- Krosnick, J. A., & Smith, W. A. (1994). Attitude strength. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior*. San Diego, CA: Academic Press.
- Ostrom, T. M., Bond, C., Krosnick, J. A., & Sedikides, C. (1994). Attitude scales: How we measure the unmeasurable. In S. Shavitt & T. C. Brock (Eds.), *Persuasion: Psychological insights and perspectives*. Boston, MA: Allyn and Bacon.
- Rahn, W. M., Krosnick, J. A., & Breuning, M. (1994). Rationalization and derivation processes in survey studies of political candidate evaluation. *American Journal of Political Science*, 38, 582-600.
- Berent, M. K., & Krosnick, J. A. (1995). The relation between attitude importance and knowledge structure. In M. Lodge & R. McGraw (Eds.), *Political judgment: Structure and process*. Ann Arbor, MI: University of Michigan Press.
- Boninger, D. S., Krosnick, J. A., & Berent, M. K. (1995). The origins of attitude importance: Self-interest, social identification, and value-relevance. *Journal of Personality and Social Psychology*, 68, 614-630.
- Boninger, D. S., Krosnick, J. A., Berent, M. K., & Fabrigar, L. R. (1995). The causes and consequences of attitude importance. In R. E. Petty and J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences*. Hillsdale, NJ: Erlbaum.
- Fabrigar, L. R., & Krosnick, J. A. (1995). Attitude importance and the false consensus effect. *Personality and Social Psychology Bulletin*, 21, 468-479.

JAN 23 2001 12:08 PM FR DEWEY BALLPINE LLP:59 6033 TO 982915#659497#12 P.00

52434 5672

- Fabrigar, L. R., & Krosnick, J. A. (1995). Attitude measurement and questionnaire design. In A. S. R. Manstead & M. Hewstone (Eds.), Blackwell encyclopedia of social psychology. Oxford: Blackwell Publishers.
- Fabrigar, L. R., & Krosnick, J. A. (1995). Voting behavior. In A. S. R. Manstead & M. Hewstone (Eds.), Blackwell encyclopedia of social psychology. Oxford: Blackwell Publishers.
- Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty and J. A. Krosnick (Eds.), Attitude strength: Antecedents and consequences. Hillsdale, NJ: Erlbaum.
- Krosnick, J. A., & Telhami, S. (1995). Public attitudes toward Israel: A study of the attentive and issue publics. International Studies Quarterly, 39, 535-554.
- Reprinted in Israel Affairs, vol. 2 (1995/1996) and in G. Sheffer (Ed.), U.S.-Israeli relations at a crossroads. Frank Cass Publishing.
- Wegener, D. T., Downing, J., Krosnick, J. A., & Petty, R. E. (1995). Measures and manipulations of strength-related properties of attitudes: Current practice and future directions. In R. E. Petty and J. A. Krosnick (Eds.), Attitude strength: Antecedents and consequences. Hillsdale, NJ: Erlbaum.
- Weisberg, H. F., Haynes, A. A., & Krosnick, J. A. (1995). Social group polarization in 1992. In H. F. Weisberg (Ed.), Democracy's feast: Elections in America. Chatham, NJ: Chatham House.
- Krosnick, J. A., Narayan, S. S., & Smith, W. R. (1996). Satisficing in surveys: Initial evidence. In M. T. Braverman & J. K. Elman (Eds.), Advances in survey research (pp. 29-44). San Francisco: Jossey-Bass.
- Miller, J. M., & Krosnick, J. A. (1996). News media impact on the ingredients of presidential evaluations: A program of research on the priming hypothesis. In D. Mutz & P. Sniderman (Eds.), Political persuasion and attitude change. Ann Arbor, MI: University of Michigan Press.
- Narayan, S., & Krosnick, J. A. (1996). Education moderates some response effects in attitude measurement. Public Opinion Quarterly, 60, 58-88.
- Vassar, P. S., Krosnick, J. A., Marquette, J., & Curtin, M. (1996). Mail surveys for election forecasting? An evaluation of the Columbus Dispatch poll. Public Opinion Quarterly, 60, 181-227.
- Krosnick, J. A., & Fabrigar, L. R. (1997). Designing rating scales for effective measurement in surveys. In L. Lyberg, P. Biemer, M. Collins, L. Decker, E. DeLeeuw, C. Dippo, N. Schwarz, and D. Trewin (Eds.), Survey Measurement and Process Quality. New York: Wiley-Interscience.

Miller, J. M., & Krosnick, J. A. (1997). The anatomy of the priming effect. In S. Iyengar and R. Roever (Eds.), Do the media govern? Politicians, voters, and reporters in America. Thousand Oaks, CA: Sage.

Carson, R. T., Hanemann, W. M., Kopp, R. J., Krosnick, J. A., Mitchell, R. C., Presser, S., Ruud, P. A., & Smith, V. K., with Conway, M., & Martin, K. (1997). Temporal reliability of estimates from contingent valuation. Land Economics, 73, 151-163.

Carson, R. T., Hanemann, W. M., Kopp, R. J., Krosnick, J. A., Mitchell, R. C., Presser, S., Ruud, P. A., & Smith, V. K., with Conway, M., & Martin, K. (1998). Referendum design and contingent valuation: The NOAA panel's no-vote recommendation. Review of Economics and Statistics, 80, 335-338.

Miller, J. M., & Krosnick, J. A. (1998). The impact of candidate name order on election outcomes. Public Opinion Quarterly, 62, 291-330.

Visser, P. S., & Krosnick, J. A. (1998). The development of attitude strength over the life cycle: Surge and decline. Journal of Personality and Social Psychology, 75, 1388-1409.

Krosnick, J. A. (1999). Maximizing measurement quality: Principles of good questionnaire design. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), Measures of political attitudes. New York: Academic Press.

Krosnick, J. A. (1999). Survey methodology. Annual Review of Psychology, 50, 537-567.

Bassili, J. N., & Krosnick, J. A. (2000). Does attitude strength moderate susceptibility to response effects? New evidence using response latency, attitude extremity, aggregate indices, and continuous measures. Political Psychology, 21, 107-132.

Holbrook, A. L., Krosnick, J. A., Carson, R. T., & Mitchell, R. C. (2000). Violating conversational conventions disrupts cognitive processing of attitude questions. Journal of Experimental Social Psychology, 36, 466-494.

Holbrook, A. L., Bizer, G. V., & Krosnick, J. A. (2000). Political behavior of the individual. In A. E. Kazdin (Ed.), Encyclopedia of psychology. Washington, DC, and New York, NY: American Psychological Association and Oxford University Press.

Krosnick, J. A., Holbrook, A. L., & Visser, P. S. (2000). The impact of the Fall 1997 debate about global warming on American public opinion. Public Understanding of Science, 9, 239-260.

Miller, J. M., & Krosnick, J. A. (2000). News media impact on the ingredients of presidential evaluations: Politically knowledgeable citizens are guided by a trusted source. American Journal of Political Science, 44, 295-309.

- Visser, P. S., Krosnick, J. A., & Lavrakas, P. (2000). Survey research methods. In H. T. Reis & C. M. Judd (Eds.), Handbook of research methods in social psychology. New York: Cambridge University Press.
- Visser, P. S., Krosnick, J. A., Marquette, J., & Curtin, M. (2000). Improving election forecasting: Allocation of undecided respondents, identification of likely voters, and response order effects. In P. Lavrakas & M. Traugott (Eds.), Election polls, the news media, and democracy. New York, NY: Chatham House.
- Bizer, G. Y., & Krosnick, J. A. (in press). Exploring the structure of strength-related attitude features: The relation between attitude importance and attitude accessibility. Journal of Personality and Social Psychology.
- Bizer, G. Y., Visser, P. S., Berent, M. K., & Krosnick, J. A. (in press). Exploring the latent structure of strength-related attitude attributes. In P. Neijens & W. Saris (Eds.), Real opinions, real change.
- Krosnick, J. A. (in press). Is political psychology sufficiently psychological? Distinguishing political psychology from psychological political science. In J. Kuklinski (Ed.), Thinking about political psychology. New York: Cambridge University Press.
- Krosnick, J. A. (in press). The challenges of psychological political science: A review of research on the projection hypothesis. In J. Kuklinski (Ed.), Thinking about political psychology. New York: Cambridge University Press.
- Krosnick, J. A. (in press). Potential pitfalls of stated choice methodologies: Comments on Layton and Brown (1998) and Swait, Adamowicz, and Louviere (1998). In D. Chapman and N. Meade (Eds.), The application of stated preference methods to resource compensation. Washington, DC: National Oceanic and Atmospheric Administration.
- Krosnick, J. A. (in press). The context and implications of Tyler and Lind's psychological analysis of compensation for natural resource damages. In D. Chapman and N. Meade (Eds.), The application of stated preference methods to resource compensation. Washington, DC: National Oceanic and Atmospheric Administration.
- Krosnick, J. A. (in press). The causes of no-opinion responses to attitude measures in surveys: They are rarely what they appear to be. In R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.), Survey nonresponse. New York: Wiley.
- Krosnick, J. A., & McGraw K. M. (in press). Psychological political science vs. political psychology true to its name: A plea for balance. In K. R. Monroe (Ed.), Political psychology. Mahwah, NJ: Erlbaum.

A66-
Krosnick, J. A. (2000). All are ready for the debate to end. *Newsday*, December 7, A63-
Gross, M. C., & Krosnick, J. A. (in press). Comparing telephone and face-to-face interviewing in
terms of data quality: The 1982 National Election Studies Method Comparison Project. In D.
O'Kroskie (Ed.), Health survey research methods. Washington, DC: National Center for Health
Services Research and Health Care Technology Assessment.

Krosnick, J. A., Visser, P. S., & Holbrook, A. L. (1998). American opinion on global warming: The impact of the Fall 1997 debate. *Resources*, 133, 5-9.

Krosnick, J. A. (2000). The threat of satiating in surveys: The shortous respondents take in answering questions. *Survey Methods Newsletter*, 20, 4-8.

Krosnick, J. A. (2000). Americans are ready for the debate to end. *Newsday*, December 7, A63-A66.

Carson, R. T., Conway, M. B., Hagemann, W. M., Krosnick, J. A., Martin, K. M., McCubb, D. R., Mitchell, R. C., Probst, S. (1995). The value of preventing oil spill injuries to natural resources along California's central coast. La Jolla, CA: Natural Resource Damage Assessment.

Institute in Political Psychology, 14, 363-373.
Carter, R. T., Hanemann, W. M., Dopp, R. J., Krosnick, J. A., Mitchell, R. C., Presser, S., Roud, P. A., & Smith, V. K. (1994). Prospective injection lost use value due to DDT and PCB contamination in the Southern California Bight. La Jolla, CA: Natural Resource Damage Assessment.

Krosnick, J. A. (1990). The impact of satisfying on survey data quality. In Proceedings of the Bureau of the Census 1989 Annual Research Conference (pp. 835-845). Washington, D.C.: U.S. Government Printing Office.

Smith, W. R., Culpapper, I. P., & Krosnick, J. A. (1992). The impact of question order on cognitive effort in survey responding. In Proceedings of the Sixth National Conference on Undergraduate Research. Minneapolis, MN: University of Minnesota Press.

Krosnick, J. A., & Hermann, M. S. (1993). Report on the 1991 Ohio State University Summer Institute in Political Psychology. Political Psychology, 14, 363-373.

Feinman, S., & Krosnick, J. A. (1989). American sentiment on Israeli-Palestinian fight: No favorites; just make peace. Op-ed piece in The Los Angeles Times, March 14, 1989. (Reprinted in the Columbus Dispatch, March 17, 1989)

Krosnick, J. A. (1987). Review of Political Cognition: The 19th Annual Carnegie Symposium on Cognition, edited by R. R. Lau and D. O. Sears. American Political Science Review, 81, 266-268.

Krosnick, J. A. (1988). Review of The Choice Questionnaire, by Peter Neijens. Public Opinion Quarterly, 52, 408-411.

Krosnick, J. A. (1993). Review of Measurement Error in Surveys, edited by P. P. Biemer, R. M. Groves, L. E. Lyberg, N. A. Mathiowetz, & S. Sudman. Public Opinion Quarterly, 57, 277-280.

Krosnick, J. A. (1994). A new introduction to survey methods: Review of Questionnaire Design, Interviewing and Attitude Measurement, by A. N. Oppenheim. Contemporary Psychology, 39, 221-222.

Krosnick, J. A. (1997). Review of Thinking About Answers: The Application of Cognitive Processes to Survey Methodology, by S. Sudman, N. M. Bradburn, and N. Schwarz, and Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research, edited by N. Schwarz and S. Sudman. Public Opinion Quarterly, 61, 664-667.

Krosnick, J. A. (1998). Review of What Americans Know about Politics and Why It Matters, by M. X. Delli-Carpini and S. Keeter. The Annals of the American Academy of Political and Social Science, 559, 189-193.

Presentations

Milburn, M. A., & Krosnick, J. A. (1979). Social psychology applied to smoking and drug abuse prevention. Paper presented at the New England Psychological Association Annual Meeting, Framingham, Massachusetts.

Krosnick, J. A., McAlister, A. L., & Milburn, M. A. (1980). Research design for evaluating a peer leadership intervention to prevent adolescent substance abuse. Paper presented at the American Psychological Association Annual Meeting, Montreal, Canada.

McAlister, A. L., Gordon, N. P., Krosnick, J. A., & Milburn, M. A. (1982). Experimental and correlational tests of a theoretical model for smoking prevention. Paper presented at the Society for Behavioral Medicine Annual Meeting, Chicago, Illinois.

Kinder, D. R., Iyengar, S., Krosnick, J. A., & Peters, M. D. (1983). More than meets the eye: The impact of television news on evaluations of presidential performance. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.

Krosnick, J. A. (1983). The relationship of attitude centrality to attitude stability. Paper presented at the American Sociological Association Annual Convention, Detroit, Michigan.

- Alwin, D. F., & Krosnick, J. A. (1984). The measurement of values: A comparison of ratings and rankings. Paper presented at the American Association for Public Opinion Research Annual Meeting, Delavan, Wisconsin.
- Schuman, H., Ludwig, J., & Krosnick, J. A. (1984). Measuring the salience and importance of public issues over time. Paper presented at the American Association for Public Opinion Research Annual Meeting, Delavan, Wisconsin.
- Krosnick, J. A. (1984). Attitude extremity, stability, and self-report accuracy: The effects of attitude centrality. Paper presented at the American Association for Public Opinion Research Annual Meeting, Delavan, Wisconsin.
- Krosnick, J. A. (1984). The influence of consensus information on predictions of one's own behavior. Paper presented at the American Psychological Association Annual Meeting, Toronto, Canada.
- Krosnick, J. A., & Alwin, D. F. (1986). An evaluation of a cognitive theory of response order effects in survey measurement. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Petersburg, Florida.
- Krosnick, J. A. (1986). A new look at question order effects in surveys. Paper presented at the Symposium on Cognitive Sciences and Survey Research, Ann Arbor, Michigan.
- Krosnick, J. A. (1987). The role of attitude importance in social evaluation: A study of policy preferences, presidential candidate evaluations, and voting behavior. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., Schuman, H., Carnot, C., Berent, M., & Boninger, D. (1987). Attitude importance and attitude accessibility. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., & Sedikides, C. (1987). Self-monitoring and self-protective biases in use of consensus information to predict one's own behavior. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., Stephens, L., Jussim, L. J., & Lynn, A. R. (1987). Subliminal priming of affect and its cognitive consequences. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., & Alwin, D. F. (1987). Satisficing: A strategy for dealing with the demands of survey questions. Paper presented at the American Association for Public Opinion Research Annual Meeting, Hershey, Pennsylvania.
- Judd, C. M., & Krosnick, J. A. (1987). The structural bases of consistency among political attitudes: The effects of political expertise and attitude importance. Paper presented at the American Psychological Association Annual Meeting, New York, New York.

JAN 23 2001 12:02 PM FR DEWEY BRUNING LLP 59 6003 TO 9029158559497#12 P.65

52434 5678

- Krosnick, J. A., & Milburn, M. A. (1987). Psychological determinants of political opinionation. Paper presented at the American Political Science Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A. (1987). The role of attitude importance in social evaluation: A study of policy preferences, presidential candidate evaluations, and voting behavior. Paper presented at the Society for Experimental Social Psychology Annual Meeting, Charlottesville, Virginia.
- Krosnick, J. A. (1988). Psychological perspectives on political candidate perception: A review of research on the projection hypothesis. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., Boninger, D. S., Berent, M. K., & Carnot, C. G. (1988). The origins of attitude importance. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., Carnot, C. G., Berent, M. K., & Boninger, D. S. (1988). An exploration of the relations among dimensions of attitude strength. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., Li, F., & Achenbach, J. (1988). Order of information presentation and the effect of base-rates on social judgments. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., Berent, M. K., Carnot, C. G., & Boninger, D. S. (1988). Attitude importance and recall of attitude relevant information. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., & Carnot, C. G. (1988). A comparison of two theories of the origins of political attitude strength. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., & Alwin, D. F. (1988). The stability of political attitudes across the life span. Paper presented at the American Association for Public Opinion Research Annual Meeting, Toronto, Canada.
- Krosnick, J. A., & Carnot, C. G. (1988). Identifying the foreign affairs attentive public: A comparison of competing theories. Paper presented to the Merison Center Seminar on Foreign Policy Decision Making, The Ohio State University, Columbus, Ohio.
- Alwin, D. F., & Krosnick, J. A. (1988). The reliability of attitudinal survey data. Paper presented at the International Conference on Social Science Methodology, Dubrovnik, Yugoslavia.
- Alwin, D. F., & Krosnick, J. A. (1988). Aging, cohort stability, and change in socio-political attitudes: Exploring the generational-persistence model. Paper presented at the International Society of Political Psychology Annual Meeting, Secaucus, New Jersey.

JAN 23 2001 12:03 PM FR DEWEY BALDWIN LLP:59 6000 TO 9082918559497812 P.99

52434 5679

BEST
COPY

Krosnick, J. A., & Kinder, D. R. (1988). Altering the foundations of popular support for the president through priming: Reagan, the Iran-Contra affair, and the American public. Paper presented at the American Political Science Association Annual Meeting, Washington, D.C.

Krosnick, J. A., & Weisberg, H. F. (1988). Liberal/conservative ideological structures in the mass public: A study of attitudes toward politicians and social groups. Paper presented at the American Political Science Association Annual Meeting, Washington, D.C.

Krosnick, J. A. (1988). Government policy and citizen passion: A study of issue publics in contemporary America. Paper presented at the Shambaugh Conference on Communication, Cognition, Political Judgment, and Affect, Iowa City, Iowa.

Berent, M. K., Krosnick, J. A., & Boninger, D. S. (1989). Attitude importance and the valenced recall of relevant information. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.

Betz, A., & Krosnick, J. A. (1989). Can people detect the affective tone of subliminally presented stimuli? Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.

Krosnick, J. A., & Berent, M. K. (1989). Age-related changes in peer and parental influence on heavy television viewing among children and adolescents. Paper presented at the Midwest Psychological Association Annual Meeting, Chicago, Illinois.

Alwin, D. F., & Krosnick, J. A. (1989). The reliability of attitudinal survey data. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Petersburg, Florida.

Krosnick, J. A. (1989). The implications of social psychological findings on compliance for recruiting survey respondents. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Petersburg, Florida.

Telhami, S., & Krosnick, J. A. (1989). Public attitudes and American policy toward the Arab-Israeli conflict. Paper presented at the International Society of Political Psychology Annual Meeting, Israel.

Krosnick, J. A., & Alwin, D. F. (1989). Symbolic versus non-symbolic political attitudes: Is there a distinction? Paper presented at the American Political Science Association Annual Meeting, Atlanta, Georgia.

Krosnick, J. A. (1989). The impact of cognitive sophistication and attitude importance on response order effects and question order effects. Paper presented at the conference entitled Order effects in social and psychological research, Nags Head Conference Center, Kill Devil Hills, North Carolina.

JAN 23 2201 12:03 PM FR DELIVER BALLANTINE LLP, 55 6033 TO 982915#659497#12 P. 91

52434 5680

- Krosnick, J. A. (1990). The impact of satisficing on survey data quality. Paper presented at the Annual Research Conference of the Bureau of the Census, U.S. Department of Commerce, Washington, D.C.
- Krosnick, J. A. (1990). New perspectives on survey questionnaire construction: Lessons from the cognitive revolution. Invited presentation at the 1990 Technical Conference of the United States General Accounting Office, College Park, Maryland.
- Krosnick, J. A. (1990). Americans' perceptions of presidential candidates: A test of the projection hypothesis. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., & Berent, M. K. (1990). The impact of verbal labeling of response alternatives and branching on attitude measurement reliability in surveys. Paper presented at the American Association for Public Opinion Research Annual Meeting, Lancaster, Pennsylvania.
- Krosnick, J. A., & Alwin, D. F. (1990). The stability of political preferences: Comparisons of symbolic and non-symbolic attitudes. Paper presented at the International Society of Political Psychology Annual Meeting, Washington, D. C.
- Krosnick, J. A. (1990). Confounding of attitude objects with attitude measurement techniques in studies of political attitude stability. Paper presented at the Summer Institute in Survey Research Techniques, University of Michigan.
- Fabrigar, L. R., & Krosnick, J. A. (1991). The effect of question order and attitude importance on the false consensus effect. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Berent, M. K., & Krosnick, J. A. (1991). Attitude measurement reliability: The impact of verbal labeling of response alternatives and branching. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Lehman, D. R., Krosnick, J. A., West, R. L., & Li, F. (1991). The focus of judgment effect: A question wording effect due to hypothesis confirmation bias. Paper presented at the American Association for Public Opinion Research Annual Meeting, Phoenix, Arizona.
- Krosnick, J. A., Boninger, D. S., Chang, Y. C., & Carnot, C. G. (1991). Attitude strength: One construct or many related constructs? Paper presented at the Nags Head Conference on Attitude Strength, Nags Head, North Carolina.
- Krosnick, J. A. (1991). Research on attitude importance: A summary and integration. Paper presented at the Nags Head Conference on Attitude Strength, Nags Head, North Carolina.
- Krosnick, J. A., & Berent, M. K. (1991). Memory for political information: The impact of attitude importance on selective exposure, selective elaboration, and selective recall. Paper presented at the Society for Experimental Social Psychology Annual Meeting, Columbus, Ohio.

JAN 23 2001 12:04 PM FR DEWEY BALLPNTINE LLP:59 6333 01 902916#559497#12 P.92

52434 5681

BEST
COPY

Krosnick, J. A., & Brannon, L. A. (1992). The impact of war on the ingredients of presidential evaluations: George Bush and the Gulf conflict. Paper presented at the Conference on the Political Consequences of War, The Brookings Institution, Washington, D.C.

Berent, M. K., & Krosnick, J. A. (1992). The relation between attitude importance and knowledge structure. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.

Smith, W. R., Culpepper, L. J., & Krosnick, J. A. (1992). The impact of question order on cognitive effort in survey responding. Paper presented at the Sixth National Conference on Undergraduate Research, University of Minnesota, Minneapolis, Minnesota.

Krosnick, J. A., & Brannon, L. A. (1992). The impact of war on the ingredients of presidential evaluations: George Bush and the Gulf conflict. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Petersburg, Florida.

Narayan, S. S., & Krosnick, J. A. (1992). Response effects in surveys as a function of cognitive sophistication. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

Brauning, D. S., Krosnick, J. A., & Berent, M. K. (1992). Imagination, perceived likelihood, and self-interest: A path toward attitude importance. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

Culpepper, L. J., Smith, W., & Krosnick, J. A. (1992). The impact of question order on satisficing in attitude surveys. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

Berent, M. K., & Krosnick, J. A. (1992). Attitude importance, information accessibility, and attitude-relevant judgments. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

Krosnick, J. A., & Brannon, L. A. (1992). The impact of war on the ingredients of presidential evaluations: George Bush and the Gulf conflict. Paper presented at the International Society of Political Psychology Annual Meeting, San Francisco, California.

Rahn, W. M., Krosnick, J. A., & Brauning, M. (1992). Rationalization and derivation processes in political candidate evaluation. Paper presented at the American Political Science Association Annual Meeting, Chicago, Illinois.

Krosnick, J. A., & Brannon, L. A. (1992). Effects of knowledge, interest, and exposure on news media priming effects: Surprising results from multivariate analysis. Paper presented at the Society for Experimental Social Psychology Annual Meeting, San Antonio, Texas.

- Berni, M. K., & Krosnick, J. A. (1993). Attitude importance and selective exposure to attitude-relevant information. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Fabrigar, L. R., & Krosnick, J. A. (1993). The impact of personal and national importance judgments on political attitudes and behavior. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Miller, J. M., & Krosnick, J. A. (1993). The effects of candidate ballot order on election outcomes. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Warren, S. S., & Krosnick, J. A. (1993). Questionnaire and respondent characteristics that cause variation in attitude surveys. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Warren, S. S., & Krosnick, J. A. (1993). Response effects in surveys as a function of cognitive sophistication. Paper presented at the American Psychological Society Annual Meeting, Chicago, Illinois.
- Smith, W. R., & Krosnick, J. A. (1993). Need for cognition, prior thought, and satisfaction in attitude surveys. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Smith, W. R., & Krosnick, J. A. (1993). Cognitive and motivational determinants of satisfaction in surveys. Paper presented at the American Psychological Society Annual Meeting, Chicago, Illinois.
- Berni, M. K., & Krosnick, J. A. (1994). Attitude importance and selective exposure to attitude-relevant information. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Fabrigar, L. R., & Krosnick, J. A. (1994). The impact of attitude importance on consistency among attitudes. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A. (1994). Survey methods and survey results: Overturning conventional wisdom. Paper presented to the American Marketing Association, Columbus Chapter.
- Krosnick, J. A., & Fabrigar, L. R. (1994). Attitude recall questions: Do they work? Paper presented at the American Association for Public Opinion Research Annual Meeting, Danvers, Massachusetts.
- Miller, J. M., & Krosnick, J. A. (1994). Does accessibility mediate agenda-setting and priming? Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

BEST
COPY

- Smith, W. R., & Krosnick, J. A. (1994). Sources of non-differentiation and mental coin-flipping in surveys: Tests of satisficing hypotheses. Paper presented at the American Association for Public Opinion Research Annual Meeting, Danvers, Massachusetts.
- Visser, P. S., & Krosnick, J. A. (1994). Mail surveys for election forecasting? An evaluation of the Columbus Dispatch Poll. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Visser, P. S., Krosnick, J. A., & Curtin, M. (1994). Mail surveys for election forecasting? Paper presented at the American Association for Public Opinion Research Annual Meeting, Danvers, Massachusetts.
- Krosnick, J. A., & Brannon, L. A. (1995). News media priming and the 1992 U.S. presidential election. Paper presented at the American Political Science Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A., & Cornet, P. J. (1995). Attitude importance and attitude change revisited: Shifts in attitude stability and measurement reliability across a presidential election campaign. Paper presented at the American Psychological Society Annual Meeting, New York, New York.
- Krosnick, J. A., & Fabrigar, L. R. (1995). Designing rating scales for effective measurement in surveys. Invited address to the International Conference on Survey Measurement and Process Quality, Bristol, England.
- Krosnick, J. A., Narayan, S. S., & Smith, W. R. (1995). The causes of survey satisficing: Cognitive skills and motivational factors. Paper presented at the Midwest Association for Public Opinion Research, Chicago, Illinois.
- Miller, J. M., Fabrigar, L. R., & Krosnick, J. A. (1995). Contrasting attitude importance and collective issue importance: Attitude properties and consequences. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Miller, J. M., & Krosnick, J. A. (1995). Ballot order effects on election outcomes. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- Miller, J. M., & Krosnick, J. A. (1995). Mediators and moderators of news media priming: It ain't accessibility, folks. Paper presented at the International Society of Political Psychology Annual Meeting, Washington, D.C.
- Narayan, S. S., & Krosnick, J. A. (1995). Education moderates response effects in surveys. Paper presented at the American Association for Public Opinion Research Annual Meeting, Ft. Lauderdale, Florida.

BEST
COPY

- Smith, W. R., & Krosnick, J. A. (1995). Mental coin-flipping and non-differentiation in surveys: Tests of satisficing hypotheses. Invited address at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Visser, P. S., & Krosnick, J. A. (1995). The relation between age and susceptibility to attitude change: A new approach to an old question. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Visser, P. S., & Krosnick, J. A. (1995). Mail surveys win again: Some explanations for the superior accuracy of the Columbus Dispatch poll. Paper presented at the American Association for Public Opinion Research Annual Meeting, Ft. Lauderdale, Florida.
- Ankerbrand, A. L., Krosnick, J. A., Cacioppo, J. T., & Visser, P. S. (1996). Candidate assessments and evaluative space. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Bizer, G. Y., & Krosnick, J. A. (1996). Attitude accessibility and importance revisited. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Krosnick, J. A. (1996). Linking survey question structure to data quality: The impact of no-opinion options. Paper presented at the conference on "Quality Criteria in Survey Research," sponsored by the World Association for Public Opinion Research, Cadenabbia, Italy.
- Krosnick, J. A., & Brannon, J. A. (1996). News media priming during the 1992 U.S. presidential election campaign. Paper presented at the International Society of Political Psychology Annual Meeting, Vancouver, British Columbia.
- Miller, J. M., Fabrigar, L. R., & Krosnick, J. A. (1996). The roles of personal importance and national importance in motivating issue public membership. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- Miller, J. M., & Krosnick, J. A. (1996). Can issue public membership be triggered by the threat of a policy change? Paper presented at the International Society of Political Psychology Annual Meeting, Vancouver, British Columbia.
- Krosnick, J. A., & Visser, P. S. (1996). Changes in political attitude strength through the life cycle. Paper presented at the Society for Experimental Social Psychology Annual Meeting, Sturbridge, Massachusetts.
- Miller, J. M., & Krosnick, J. A. (1997). The impact of policy change threat on issue public membership. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- Ankerbrand, A. L., Krosnick, J. A., Cacioppo, J. T., Visser, P. S., & Gardner, W. (1997). Attitudes toward political candidates predict voter turnout. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

BEST
COPY

- Ankerbrand, A. L., & Krosnick, J. A. (1997). Response order effects in dichotomous questions: A social desirability explanation. Paper presented at the American Psychological Society Annual Meeting, Washington, DC.
- Krosnick, J. A. (1997). Miraculous accuracy in political surveys: The keys to success. Presentation in the Federation of Behavioral, Psychological, and Cognitive Sciences Seminar on Science and Public Policy, Library of Congress, Washington, D.C.
- Krosnick, J. A. (1997). Non-attitudes and no-opinion filters. Paper presented at the Conference on no opinion, instability, and change in public opinion research. University of Amsterdam, the Netherlands.
- Krosnick, J. A. (1997). Attitude strength. Paper presented at the Conference on no opinion, instability, and change in public opinion research. University of Amsterdam, the Netherlands.
- Bizer, G. Y., & Krosnick, J. A. (1998). The relation between attitude importance and attitude accessibility. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Holbrook, A., Krosnick, J. A., Carson, R. T., & Mitchell, R. C. (1998). Violating conversational conventions disrupts cognitive processing of survey questions. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Louis, Missouri.
- Krosnick, J. A. (1998). Applying stated preference methods to assessing the value of public goods. Paper presented at the National Oceanic and Atmospheric Administration Application of Stated Preference Methods to Resource Compensation Workshop, Washington, DC.
- Krosnick, J. A. (1998). Implications of psychological research on justice and compensation for handling of natural resource damage cases. Paper presented at the National Oceanic and Atmospheric Administration Application of Stated Preference Methods to Resource Compensation Workshop, Washington, DC.
- Krosnick, J. A. (1998). Acquiescence: How a standard practice in many survey organizations compromises data quality. Paper presented at the conference on "Quality Criteria in Survey Research," sponsored by the World Association for Public Opinion Research, Cadenabbia, Italy.
- Krosnick, J. A., Lacy, D., & Lowe, L. (1998). When is environmental damage Americans' most important problem? A test of agenda-setting vs. the issue-attention cycle. Paper presented at the International Society of Political Psychology Annual Meeting, Montreal, Quebec, Canada.
- Vister, P. S., Krosnick, J. A., Marquette, J., & Curtin, M. (1998). Improving election forecasting: Allocation of undecided respondents, identification of likely voters, and response order effects. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Louis, Missouri.

JAN 23 2001 12:05 PM FR DELIVERY BALLANTINE CLP:59 6303 TO 9029165859497212 P.57

52434 5686

Krosnick, J. A. (1998). The impact of science on public opinion: How people judge the national seriousness of global warming and form policy preferences. Paper presented at the American Political Science Association Annual Meeting, Boston, Massachusetts.

Krosnick, J. A. (1998). Response choice order and attitude reports: New evidence on conversational conventions and information processing biases in voting and in election forecasting polls. Paper presented at the Society of Experimental Social Psychology Annual Meeting, Lexington, Kentucky.

Krosnick, J. A. (1998). The impact of the Fall 1997 debate about global warming on American public opinion. Paper presented at Resources for the Future, Washington, D.C.

Krosnick, J. A. (1998). What the American public believes about global warming: Results of a national longitudinal survey study. Paper presented at the Amoco Public and Government Affairs and Government Relations Meeting, Woodruff, Wisconsin.

Krosnick, J. A. (1998). What the American public believes about global warming: Results of a national longitudinal survey study. Paper presented in the Second Annual Carnegie Lectures on Global Environmental Change, Carnegie Museum of Natural History, Pittsburgh, Pennsylvania.

Green, M. C., & Krosnick, J. A. (1999). Survey satisficing: Telephone interviewing increases non-differentiation and no opinion responses. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.

Green, M. C., & Krosnick, J. A. (1999). Comparing telephone and face-to-face interviewing in terms of data quality: The 1982 National Election Studies Method Comparison Project. Paper presented at the Seventh Annual Conference on Health Survey Research Methods, Williamsburg, Virginia.

Holbrook, A. L., Krosnick, J. A., Carson, R. T., & Mitchell, R. C. (1999). Violating conversational conventions disrupts cognitive processing of attitude questions. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Petersburg, Florida.

Krosnick, J. A. (1999). What happens when survey respondents don't try very hard? The notion of survey satisficing. Paper presented at the National Center for Social Research, London, United Kingdom.

Krosnick, J. A. (1999). Satisficing: A single explanation for a wide range of findings in the questionnaire design literature. Paper presented at Linking the Path: A Conference for Analysts, Researchers, and Consultants, sponsored by the Gallup Organization, Lincoln, Nebraska.

BEST
COPY

- Krosnick, J. A. (1999). Methodology for the NAOMS Survey. Presentation at the Workshop on the Concept of the National Aviation Operational Monitoring System (NAOMS). Sponsored by the National Aeronautics and Space Administration, Alexandria, Virginia.
- Krosnick, J. A. (1999). Refining measurement of public values for policy-making: A test of contingent valuation procedures. Paper presented at the American Political Science Association Annual Meeting, Atlanta, Georgia.
- Krosnick, J. A. (1999). The threat of satisficing in surveys: The shortcuts respondents take in answering questions. Paper presented at the National Center for Social Research Survey Methods Seminar on Survey Data Quality, London, England.
- Krosnick, J. A. (1999). Optimizing questionnaire design: How to maximise data quality. Paper presented at the National Center for Social Research Survey Methods Seminar on Survey Data Quality, London, England.
- Krosnick, J. A. (1999). The causes and consequences of no-opinion responses in surveys. Paper presented at the International Conference on Survey Nonresponse, Portland, Oregon.
- Miller, J. M., & Krosnick, J. A. (1999). The impact of threats and opportunities on political participation. Paper presented at the Midwest Political Science Association Annual Meeting, Chicago, Illinois.
- O'Muircheartaigh, C., Krosnick, J. A., & Helic, A. (1999). Middle alternatives, acquiescence, and the quality of questionnaire data. Paper presented at the American Association for Public Opinion Research Annual Meeting, St. Petersburg, Florida.
- Blass, G. Y., & Krosnick, J. A. (2000). The importance and accessibility of attitudes: Helping explain the structure of strength-related attitude attributes. Paper presented at the Midwestern Psychological Association Annual Meeting, Chicago, Illinois.
- Holbrook, A. L., Krosnick, J. A., Visser, P. S., Gardner, W. L., & Cacioppo, J. T. (2000). The formation of attitudes toward presidential candidates and political parties: An asymmetric nonlinear process. Paper presented at the American Psychological Society Annual Meeting, Miami, Florida.
- Holbrook, A. L., Krosnick, J. A., Visser, P. S., Gardner, W. L., & Cacioppo, J. T. (2000). The formation of attitudes toward presidential candidates and political parties: An asymmetric, nonlinear, interactive process. Paper presented at the American Political Science Association Annual Meeting, Washington, D.C.
- Krosnick, J. A. (2000). The present and future of research on survey non-responses: Reflections on Portland '99 and beyond. Roundtable presentation at the American Association for Public Opinion Research Annual Meeting, Portland, Oregon.

JAN 23 2001 12:05 PM FR DEJBY BRILLANTINE LLP:59 6303 TO 9026:68559497412 P.99

52434 5688

Krosnick, J. A., Holbrook, A. L., Moore, D. W., & Tourangeau, R. (2000). Response order effects in Gallup surveys: Linguistic structure and the impact of respondent ability, motivation, and task difficulty. Paper presented at the American Association for Public Opinion Research Annual Meeting, Portland, Oregon.

Miller, J. M., Krosnick, J. A., & Lowe, L. (2000). The impact of policy change threat on financial contributions to interest groups. Paper presented at an invited conference, Political Participation: Building a Research Agenda, Center for the Study of Democratic Politics, Princeton University, Princeton, New Jersey.

Miller, J. M., & Krosnick, J. A. (2000). Attitude change outside the laboratory: News media "priming" turns out not to be priming after all. Paper presented at the Society of Experimental Social Psychology Annual Meeting, Atlanta, Georgia.

Saris, W., & Krosnick, J. A. (2000). The damaging effect of acquiescence response bias on answers to agree/disagree questions. Paper presented at the American Association for Public Opinion Research Annual Meeting, Portland, Oregon.

Off-Campus Academic Colloquia

- 1985
State University of New York at Stony Brook, Department of Political Science.
Princeton University, Department of Sociology.
Princeton University, Department of Politics.
University of California at Berkeley, Department of Sociology.
Yale University, Department of Sociology.
Yale University, Department of Political Science.
Ohio State University, Department of Psychology.
University of Southern California, Annenberg School for Communication.
- 1986
University of Michigan, Department of Sociology.
- 1987
Yale University, Department of Psychology.
Yale University, Department of Political Science.
University of Michigan, Department of Sociology.
- 1988
University of Minnesota, Department of Political Science.
- 1989
University of Florida, Department of Psychology.
University of Florida, Bureau of Economic and Business Research.
Denison University, Department of Psychology.
- 1991
University of Michigan, Summer Institute in Survey Research Techniques.
- 1992
University of Michigan, Summer Institute in Survey Research Techniques.
University of Michigan, Department of Communication.

BEST
COPY

- 1993 University of Wisconsin, Departments of Psychology, Sociology, and Political Science.
University of Michigan, Summer Institute in Survey Research Techniques.
- 1994 Yale University, Department of Psychology.
University of Michigan, Research Center for Group Dynamics.
Cornell University, Peace Studies Center.
- 1995 University of Michigan, Summer Institute in Survey Research Techniques.
University of Minnesota, Department of Political Science.
- 1996 University of Pennsylvania, Annenberg School for Communication.
University of Chicago, Center for Decision Research.
Purdue University, Department of Psychology.
- 1997 Stanford University, Department of Psychology.
University of California - Berkeley, Institute of Governmental Studies.
University of California - Berkeley, Institute of Personality and Social Research.
University of California - Irvine, Department of Social Sciences.
University of California - Los Angeles, Institute for Social Science Research.
University of California - Santa Barbara, Department of Psychology.
University of California - Santa Cruz, Board of Psychology.
Center for Advanced Study in the Behavioral Sciences, Stanford, California.
London School of Economics and Political Science, Methodology Institute.
- 1998 Arizona State University, Department of Psychology.
London School of Economics and Political Science, Methodology Institute.
University of Amsterdam, Department of Psychology.
Carnegie Mellon University, Center for the Integrated Study of the Human Dimensions of Global Change, Department of Engineering and Public Policy.
- 1999 University of Chicago, American Politics Workshop, Department of Political Science.
Indiana University, Departments of Political Science and Psychology.
University of Minnesota, Departments of Political Science and Psychology.
- 2000 University of California, Los Angeles, Department of Political Science
University of Southern California, Jesse M. Unruh Institute of Politics
University of Michigan, Survey Research Center, Institute for Social Research

JAN 20 2001 12:07 AM FR DEWEY BALLANTINE LLP 59 6033 TO 9029168559497412 P.01

52434 5690

BEST
COPY

28

Colloquia at Ohio State University

- 1986 Colloquium, Department of Political Science.
Colloquium, Department of Psychology.
- 1987 Colloquium, Department of Psychology.
- 1988 Colloquium, Department of Psychology.
- 1990 Colloquium, Department of Psychology.
- 1991 Mereson Center World Affairs Seminar, Mereson Center.
- 1992 Colloquium, Political Psychology Interest Group.
- 1996 Behavioral Decision Theory Colloquium Series, Department of Psychology.
CIC Interactive Video Methods Seminar, Department of Political Science.
- 1997 Interdisciplinary Seminar on Survey Research Methods, Center for Human
Resource Research.
- 1999 Colloquium, Department of Agricultural, Environmental, and Development
Economics.
- 2000 Colloquium, Center for Survey Research.

Memberships in Professional Associations

American Psychological Association
American Psychological Society
American Political Science Association
American Association for Public Opinion Research
Society for the Psychological Study of Social Issues
Society for Personality and Social Psychology
Society of Experimental Social Psychology
Midwest Psychological Association
Midwest Political Science Association
International Society of Political Psychology

Professional Service

- 1989-1990 Chair, Student Paper Competition Committee, American Association for Public
Opinion Research.

JAN 23 2201 12:07 AM FR DEWEY BR/ANTINE LRP.59 6333 TO 90291E#658497#12 P.02

52434 5691

BEST
COPY

- 1990 Member, Planning Committee for the 1990 National Election Study.
- 1990 Member, Conference Committee for the 1991 Annual Meeting, American Association for Public Opinion Research.
- 1990-1991 Organizer, 1991 Annual Meeting, Society of Experimental Social Psychology, Columbus, Ohio.
- 1991 Participant in an Expert Questionnaire Evaluation Panel as a part of a Project Comparing Pre-Testing Methods, National Center for Health Statistics.
- 1994 Member, Student Paper Competition Committee, American Association for Public Opinion Research.
- 1995 Member, National Science Foundation Special Grant Proposal Evaluation Panel on Valuation for Environmental Policy.
- 1996 Member, Student Paper Competition Committee, American Association for Public Opinion Research.
- 1996 Member, Planning Committee for the 1996 National Election Study.
- 1997-1998 Program Coordinator, 1998 Annual Meeting, International Society for Political Psychology, Montreal, Canada.
- 1997-2000 Member, Conference Committee, American Association for Public Opinion Research Annual Meeting.
- 1998 Member, Planning Committee for the 1998 National Election Pilot Study.
- 1999 Senior Research Advisor, The Gallup Organization.
- 1997- Member, Board of Overseers, National Election Studies, Institute for Social Research, University of Michigan.
- 2000 Member, Governing Council, International Society of Political Psychology.
- 2000 Member, Survey Methodology Group of the National Longitudinal Survey of Youth.
- 2001- Member, Board of Overseers, General Social Survey, National Opinion Research Center, University of Chicago.

Department and University Service

- 1985-1996 Faculty Advisor, Social Psychology Colloquium Series
- 1985-1990 Chair, Social Psychology Area Admissions Committee

JAN 23 2001 12:07 PM FR DEWEY BALDWIN LLP 59 6000 TO 902916859497812 P.03

52434 5692

1985-1990 Member, Psychology Department Admissions Committee

1986-1987 Member, Psychology Department Stipends Committee

1986-1988 Member, Lazenby Equipment Committee

1986-1987 Member, Social Psychology Area Search Committee for Two Permanent Senior Faculty Members

1988-1989 Member, Social Psychology Area Search Committee for Junior Faculty Member

1989-1991 Member, Search Committee for Junior Faculty Member in Industrial/Organizational Psychology

1989-1994 Co-Coordinator, Political Psychology Minor Program Steering Committee, Political Science Department

1989-1996, 1999-2000 Member, Psychology Department Speakers Committee

1990-1996 Member, Psychology Department Subject Pool Supervisory Committee

1993-1996 Chair, College of Social and Behavioral Sciences Survey Research Advisory Committee

1995-1996 Member, Political Science Department Search Committee

2000 Chair, Social Psychology Senior Faculty Search Committee

Ad Hoc Reviewer

Journal of Personality and Social Psychology
 Journal of Experimental Social Psychology
 Personality and Social Psychology Bulletin
 Social Psychology Quarterly
 Social Cognition
 Basic and Applied Social Psychology
 Psychological Review
 Psychological Bulletin
 Psychological Science
 Personality and Social Psychology Review
 American Political Science Review
 American Journal of Political Science
 American Politics Quarterly

Western Political Quarterly
 Political Research Quarterly
 Political Behavior
 Journal of Politics
 Harvard International Journal of Press/Politics
 Southwestern Political Review
 Public Opinion Quarterly
 International Journal of Public Opinion Research
 Political Psychology
 Political Communication
 International Studies Quarterly
 American Sociological Review
 Sociological Methods and Research
 Social Science Quarterly
 Journal of Official Statistics
 Journal of the American Statistical Association
 Journal of Economic Psychology
 Communication Research
 Journal of Consumer Research
 Journal of Research in Personality
 Developmental Psychology
 Motivation and Emotion
 Psychophysiology
 Preventive Medicine
 New Jersey Medicine
 Academic Press
 Praeger Publishers
 Alfred A. Knopf Publishers
 Brooks/Cole Publishing Company
 Harper and Row Publishers
 MacMillan Publishing Company
 Cambridge University Press
 Oxford University Press
 W. W. Norton
 W. H. Freeman
 National Academy of Sciences
 National Science Foundation - Social Psychology Program
 National Science Foundation - Technology Program
 National Science Foundation - Political Science Program
 National Science Foundation - Program in Methodology, Measurement, and Statistics in the Social Sciences
 Society for Consumer Psychology
 American Psychological Association
 University of Michigan (P & T)

BEST
COPY

BEST
COPY

32

Consulting and Court Testimony

Office of Social Research, CBS Inc., New York, New York.
 Beau Townsend Ford Dealership, Dayton, Ohio.
 Office of Lake County Prosecuting Attorney, Painesville, Ohio.
 The Attorney General of the State of Ohio, Columbus, Ohio.
 Socio-Environmental Studies Laboratory, National Institutes of Health, Washington, D.C.
 Center for Human Resource Research, Columbus, Ohio.
 National Oceanic and Atmospheric Administration, Washington, D.C.
 Center for Survey Methods Research, U.S. Bureau of the Census, Washington, D.C.
 The Urban Institute, Washington, D.C.
 United States Trotting Association, Columbus, Ohio.
 Washington State University, Pullman, Washington.
 Healthcare Research Systems, Columbus, Ohio.
 Berlex Laboratories, Inc., Wayne, New Jersey.
 Robert Dodd and Associates/The Kistler Memorial Institute/
 National Aeronautics and Space Administration.
 Pfizer, Inc., New York, New York.
 Donald McTigue, Esq., Columbus, Ohio.
 Centers for Disease Control and Prevention, Atlanta, Georgia.

I. Short Courses on Questionnaire Design

United States General Accounting Office, Washington, DC.
 Internal Revenue Service, Washington, DC.
 Monitor Company, Cambridge, Massachusetts.
 American Association for Public Opinion Research Annual Meeting, St. Louis, Missouri.
 American Association for Public Opinion Research Annual Meeting, Portland, Oregon.
 New York Chapter of the American Association for Public Opinion Research, New York, New York.
 Office for National Statistics, London, United Kingdom.
 Market Strategies, Southfield, Michigan.
 Total Research Corporation, Princeton, New Jersey.
 Pfizer, Inc., New York, New York.
 Worldwide Market Intelligence Conference, IBM, Rye, New York.

University Teaching

Summer Institute in Political Psychology (Instructor and Co-Director), Political Science and Psychology 892A, 892B, Ohio State University.
 Research Methods in Social Psychology, Psychology 872, Ohio State University.
 Systematic Theory in Social Psychology, Psychology 873C, Ohio State University.
 Psychological Perspectives on Political Behavior, Psychology 873D, Ohio State University.

The Psychology of Mass Politics, Political Science 894, Ohio State University.

Questionnaire Design for Attitude Measurement, Psychology 788, Ohio State University.

Supervisor of graduate student TAs teaching Introduction to Social Psychology, Psychology 320, Ohio State University.

Introduction to Social Psychology, Psychology H320 & H367.01, Ohio State University.

Questionnaire Design for Attitude Measurement, Psychology 711, Summer Institute in Survey Research Techniques, University of Michigan.

Cognitive Psychology and Survey Methods, Psychology 988, Summer Institute in Survey Research Techniques, University of Michigan.

Response Scales for Satisfaction Measurement, Joint Program in Survey Methodology, University of Maryland-University of Michigan.

Designing Effective Questionnaires, Methodology Institute, London School of Economics and Political Science, London, United Kingdom.

Techniques for Assessing Questionnaire Quality, Department of Methodology and Statistics, University of Amsterdam, The Netherlands.

Advanced Issues in Questionnaire Design, Psychology 688, Summer Institute in Survey Research Techniques, University of Michigan.

Theses and Dissertations Supervised

Borjas, D. S. (1988). The determinants of attitude importance. Master's Thesis.

Chuang, Y. C. (1988). The structure of attitude strength. Master's Thesis.

Chuang, Y. C. (1989). Policy voting and persuasion in American presidential elections: The role of attitude importance. Ph.D. Dissertation.

Kost, K. A. (1989). Complexity as a situationally modifiable property of cognitive structure. Master's Thesis.

Li, F. (1989). Order of information acquisition and the effect of base-rates on social judgments. Master's Thesis.

Berens, M. K. (1990). Attitude importance and the recall of attitude-relevant information. Master's Thesis.

JAN 23 2001 12:08 PM FR DEWEY BALLANTINE LLP:59 6033 TO 9029:6#559497#12 P.07

52434 5696

- Revised January, 2001.
- Miller, J. M. (2000). Threats and Opportunities as Motivators of Political Activism. Ph.D. Dissertation.
- Visser, P. S. (1998). Testing the common-factors model of attitude strength. Ph.D. Dissertation.
- Bizam, G. Y. (1997). The relation between attitude importance and attitude accessibility. Master's Thesis.
- Altabek, A. I. (1997). Attitude formation and the bivariate model: A study of the relationship between beliefs and attitudes. Master's Thesis.
- Narain, S. S. (1995). Satisfaction in attitude surveys: The impact of cognitive skills, motivation, and task difficulty on response effects. Ph.D. Dissertation.
- Visser, P. S. (1995). The relationship between age and susceptibility to attitude change: A new approach to an old question. Master's Thesis.
- Smith, W. A. (1995). Mental set-shifting and non-differentiation in surveys: Tests of satisficing hypotheses. Honors Thesis.
- Miller, J. M. (1994). Mediators and moderators of agenda-setting and priming. Master's Thesis.
- Narain, S. S. (1994). Response effects in attitude surveys: An examination of the satisficing explanation. Master's Thesis.
- Berndt, M. K. (1994). Attitude importance and information processing. Ph.D. Dissertation.
- Reid, D. R. (1991). Associative memory structure and the evaluation of political leaders. Ph.D. Dissertation.
- Fabrigar, L. R. (1991). The effect of question order and attitude importance on the false consensus effect. Master's Thesis.
- Betz, A. L. (1990). Backward conditioning of attitudes using subliminal photographic stimuli. Master's Thesis.



produced by RJRTC in HUMPHREY

APPENDIX B

INSTRUCTIONS GIVEN TO DEPOSITION TRANSCRIPT CODERS

JAN 23 2001 12:41 PM FR DEWEY BELLANTINE LLP.59 6333 TO 9829168559497412 P.09

52434 5698

BEST
COPY

Coding Instructions

1. Please open an Excel spreadsheet and create columns with the following headings:

-Deposition number
-Name of deponent
-Q1
-Q2
-Q3
-Q4
-Q5
-Q6
-Q7
-Q8
-Q9
-Q10
-Q11
-Q12
-Q13
-Q14
-Q15
-Q16
-Q17
-Q18
-Q19
-Q20

2. On each row, please type a deposition number and name of deponent so that all the depositions you have correspond to one row.

3. Please read over all of the coding questions on the attached list and become very familiar with them.

4. You should have a package of "exhibits." These are the written materials that were shown to the deponents during their depositions. Please read these through carefully so you are fully familiar with them.

5. Please read the entire text of one deposition to get the feel for how the questioning goes.

6. Please answer each of the questions on the attached sheets by typing the appropriate answers into the appropriate cells of your Excel spreadsheet.

7. Here are some specific guidelines regarding how to answer the coding questions:

JAN 23 2001 12:41 PM FR DEWEY BALLANTINE LLP 59 5032 TO 9029154659457412 P.118

52434 5699

-Answer each coding question in one of three ways: "Yes", "No", or "DK".

-Answer a question "DK" only when the deponent never said anything that you could use to deduce an answer to the coding question.

-Bear in mind that a deponent may say a variety of different things throughout the deposition that are relevant to any one of the coding questions. Please read and consider everything the deponent said on a topic in deciding how to answer each coding question.

-When you find text in a transcript that justifies your answer to one of the coding questions, please circle the text darkly in red pencil and write next to the circle the number(s) of the question(s) that you will answer using the circled information (e.g., "Q4"). Please circle all of the text that was relevant to and useful in answering each coding question.

-Some coding questions include the word "cause". Here is some information about how you should define the word "cause" in your own thinking:

A synonym for "cause" is "contribute to".

If having A causes a person to get B, this means that having A increases the person's chances of getting B. One example of such causality would be if everyone who does not have A does not have B, and if everyone who has A also has B, and that the only reason these latter people have B is because they have A. In other words, having A is necessary and sufficient for a person to have B.

But it is also possible that A can be a cause of B because having A increases a person's chances of getting B less perfectly. That is, some people without A can have B. And some people with A can be without B. But some of the people who have B have it because they also have A.

-When looking in a deposition text for the answer to a coding question, you DO NOT have to find the EXACT wording of the coding question used in the deposition. Your job is to read the transcript and use the information there to decide what the respondent meant to say without worrying about the exact wording matching or not matching the coding sheet.

-However, if a deponent never provided any information with which you can answer a coding question, you should NOT try to guess what the deponent WOULD HAVE said if he or she had been asked another question that he or she was not asked. Instead, you should only answer the coding questions using things the deponent actually said that is directly relevant to answering the questions.

3. Please code all the other depositions that you have.

JAN 23 2003 12:42 PM FR DUEBY BRLANTIN LLP 59 6003 01 902916H559497412 P11

52434 5700

BEST
COPY

3

9. If you have any questions or difficulties, please contact Jon Krosnick to get help. He can be reached at 614-292-3496 (office), 614-847-9571 (home), 614-579-7983 (cell phone), or by email.

10. Do NOT discuss ANYTHING about this work with ANYONE other than Jon Krosnick. Do NOT show ANY of the written materials you get for this work to ANYONE.

produced by RJRTC
in
HUMPHREY

JAN 23 2001 12:42 PM FR DEWEY BALLANTINE LLP.59 6333 TO 902916559497812 P.12

52434 5701

JAN 23 2001 12:42 AM FR DEWEY BALLANTINE LLP.59 6333 TO 9829:59559497H12 F.10

II CODING QUESTIONS

1. At the time that the person became a regular cigarette smoker, did he/she believe that smoking cigarettes increased people's chances of getting lung cancer or heart disease or any other serious disease?
2. At any other time that the person was smoking cigarettes regularly, did he/she believe that smoking cigarettes increased people's chances of getting lung cancer or emphysema or heart disease or any other serious disease?
3. At the time that the person became a regular cigarette smoker, did he/she believe that smoking cigarettes increased his/her own chances of getting lung cancer or emphysema or heart disease or any other serious disease?
4. At any other time that the person was smoking cigarettes regularly, did he/she believe that smoking cigarettes increased his/her own chances of getting lung cancer or emphysema or heart disease or any other serious disease?
5. At the time that the person became a regular cigarette smoker, did he/she believe that smoking cigarettes was addictive for people?
6. At any other time that the person was smoking cigarettes regularly, did he/she believe that smoking cigarettes was addictive for people?
7. At the time the person became a regular cigarette smoker, did he/she believe that he/she would become addicted to smoking cigarettes?
8. At any other time that the person was smoking cigarettes regularly, did he/she believe that he/she was personally addicted to smoking cigarettes?
9. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes increases a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease?
10. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes does not increase a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease?
11. Did the person ever hear, or hear about, any statement by any tobacco company that the scientific evidence is inconclusive as to whether or not smoking cigarettes increases a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease?
12. Did the person ever hear, or hear about, any statement by any tobacco company about whether or not smoking cigarettes is addictive?

BEST
COPY

13. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes is not addictive?

14. Did the person ever hear, or hear about, any statement by any tobacco company that the scientific evidence regarding the addictiveness of smoking cigarettes is inconclusive?

15. Did the person ever hear, or hear about, any statement by any tobacco company that smoking cigarettes is addictive?

16. If any tobacco company had stated publicly that smoking cigarettes increases a person's chances of getting lung cancer or emphysema or heart disease or any other serious disease, would that have caused the person to not start smoking cigarettes at all, to quit, to quit sooner than he/she did, or to try to quit?

17. If any tobacco company had stated publicly that smoking cigarettes is addictive, would that have caused the person to not start smoking cigarettes at all, to quit, to quit sooner than he/she did, or to try to quit?

18. At any time, did the person know the name of a specific cancer-causing substance (also called a carcinogen) that is in tobacco or cigarette smoke?

19. Did the person ever hear, or hear about, any statement by any tobacco company naming a specific cancer-causing substance (also called a carcinogen) that is in tobacco or cigarette smoke?

20. If any tobacco company had stated publicly the name of a cancer-causing substance that is in tobacco or cigarette smoke, would that have caused the person to not start smoking cigarettes at all, to quit, to quit sooner than he/she did, or to try to quit?

JAN 23 2001 12:42 AM FR DEWEY BR/ANTINE LLP.S9 6033 TO 5029164659497#12 F.14

52434 5703

Produced by RJRTC
in
HUMPHREY

APPENDIX C

RESULTS OF CODING

52434 5704

BEST
COPY

JAN 23 2001 12:43 PM FR DEWEY BALLANTINE LLP.S9 B033 TO 982916#6559497#12 P.15

Produced by RJRTC

in
HOMER

JAN 20 2001 12:43 PM FR DELBY BALLANTINE LLP.59 6033 TO 902916#659497#12 P.16

52434 5705

Produced by RJRTC in HUMPHREY

JAN 23 2001 12:43 PM FR DEWEY BALLANTINE LLP 59 6333 TO 9029164655497412 P.17

2

52434 5706

Produced by RJRTC
in
HUMPHRIES

JAN 23 2001 12:43 PM FR DEXEY BALLPINE LLP.59 6303 TO 902916R559497M12 P.18

52434 5707

52434 5708

JAN 23 2001 12:43 AM FR DEWEY BALLANTINE LLP.55 6033 TO 902916#6559457#12 P.19

Produced by RIRTC
in
HUMPHREY

5

Country	Year	Value	Unit
China	2000	1.0	1000
India	2000	1.0	1000
USA	2000	1.0	1000
Japan	2000	1.0	1000
Germany	2000	1.0	1000
France	2000	1.0	1000
UK	2000	1.0	1000
Italy	2000	1.0	1000
Spain	2000	1.0	1000
Sweden	2000	1.0	1000
Netherlands	2000	1.0	1000
Belgium	2000	1.0	1000
Austria	2000	1.0	1000
Switzerland	2000	1.0	1000
Portugal	2000	1.0	1000
Greece	2000	1.0	1000
Ireland	2000	1.0	1000
Finland	2000	1.0	1000
Denmark	2000	1.0	1000
Norway	2000	1.0	1000
South Korea	2000	1.0	1000
Singapore	2000	1.0	1000
Hong Kong	2000	1.0	1000
Taiwan	2000	1.0	1000
Malaysia	2000	1.0	1000
Thailand	2000	1.0	1000
Philippines	2000	1.0	1000
Indonesia	2000	1.0	1000
Brazil	2000	1.0	1000
Argentina	2000	1.0	1000
Chile	2000	1.0	1000
Colombia	2000	1.0	1000
Venezuela	2000	1.0	1000
Ecuador	2000	1.0	1000
Peru	2000	1.0	1000
Guatemala	2000	1.0	1000
Honduras	2000	1.0	1000
El Salvador	2000	1.0	1000
Nicaragua	2000	1.0	1000
Panama	2000	1.0	1000
Costa Rica	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	1000
Barbados	2000	1.0	1000
Suriname	2000	1.0	1000
Guyana	2000	1.0	1000
Belize	2000	1.0	1000
Haiti	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	1000
Barbados	2000	1.0	1000
Suriname	2000	1.0	1000
Guyana	2000	1.0	1000
Belize	2000	1.0	1000
Haiti	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	1000
Barbados	2000	1.0	1000
Suriname	2000	1.0	1000
Guyana	2000	1.0	1000
Belize	2000	1.0	1000
Haiti	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	1000
Barbados	2000	1.0	1000
Suriname	2000	1.0	1000
Guyana	2000	1.0	1000
Belize	2000	1.0	1000
Haiti	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	1000
Barbados	2000	1.0	1000
Suriname	2000	1.0	1000
Guyana	2000	1.0	1000
Belize	2000	1.0	1000
Haiti	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	1000
Barbados	2000	1.0	1000
Suriname	2000	1.0	1000
Guyana	2000	1.0	1000
Belize	2000	1.0	1000
Haiti	2000	1.0	1000
Dominican Republic	2000	1.0	1000
Jamaica	2000	1.0	1000
Trinidad and Tobago	2000	1.0	

produced by RJRTC

in

HUMPHREY

APPENDIX D

SRBI SURVEY DATA COLLECTION PROCEDURES

JAN 23 2001 12:44 PM FR DEWEY BALLANTINE LLP.S9 B333 TO 982916H6559497012 P.21

52434 5710

JAN 23 2001 12:44 AM FR DEWEY BALLANTINE LLP.59 5333 TO 902915#655497#12 P.22

SRBI draws upon a staff of experienced telephone supervisors for its projects. All supervisors participate in the project training session. In addition, they undergo an additional review on interview coding instructions, refusal prevention and conversion, and study issues.

Two types of supervisors are utilized in SRBI telephone surveys: shift supervisors and coordinators. A shift supervisor is on duty each of the fourteen weekly shifts. They are responsible for quality control, maintaining production rates, and supervising the monitors. The shift supervisors currently working for SRBI have more than seven years experience as telephone interviewers, and the

Supervisory Staff

All aspects of interview recruitment, scheduling, and training are directed by the administrative staff of the telephone research centers. The telephone administrative staff directs operations according to the specifications of the project director and analytic staff. The administrative staff maintains detailed records throughout the field process so that the progress of the survey can be monitored by the project director and documented for the client.

All interviewers who work for SRBI are thoroughly trained and closely supervised. Special training sessions are undertaken for each new project to help ensure quality control over the collection of survey data. New interviewers are thoroughly screened, their references checked, and they are interviewed before being hired as a SRBI telephone interviewer. The interviewers receive extensive instruction in the methods and procedures which are expected at SRBI before they ever perform a single interview. New SRBI interviewers are monitored extremely closely during the first two weeks of their employment. After this trial period, their performance is monitored regularly. It is all of our interviewers, twice per shift.

The quality of the interviewing staff used on a survey is one of the most important factors affecting the validity, reliability, and timeliness of the data collected. Our telephone interviewing staff consists of more than 600 telephone interviewers, who are employed on a full or part-time basis by our firm. Interviewers are selected based upon voice, diction, and ability to develop rapport with respondents. The interviewing staff is refreshed by an ongoing recruitment, testing, and training program.

Interviewing Staff

Here is a description of our interviewing staff and interview protocols:

All interviewing at SRBI is conducted in-house at our three fully supervised and monitored interviewing facilities. The most important components of maintaining high response rates are: (1) careful initial recruitment and selection of interviewers; (2) an experienced interviewing and supervisory staff with extensive training both in interviewing skills generally and on the specific study; (3) a multiple-call design, with 10 call attempts to "no answers" and "buses"; (4) careful monitoring and supervising of interviewers; (5) refusal conversion protocols; (6) a questionnaire design which minimizes interruptions.

SRBI Data Collection Procedures

(a)

supervisors and are among the best in survey research. They work closely with the project director and design team in developing the field procedures for a project.

The line supervisors or monitors are responsible for the direct oversight of individual interviewers. They audio-monitor the interviews being conducted. They evaluate the performance of the interviewers in performing the interview on a set of criteria established by the Operations Director. They also check the accuracy of interviewer recording, as well as interviewing.

Training of Telephone Interviewers

All interviewers who work for SRBI are thoroughly trained both in general interviewing procedures and specific study protocol. SRBI interviewers follow a general manual on interviewing procedures, which was developed by our operations staff. The areas, which are considered important in the general background training of interviewers, regardless of the specific project, include:

- An understanding of sampling procedures and the importance of rigorous adherence to sampling procedures in the field;
- An understanding of respondent selection procedures within a unit and the importance of following them as rigorously as the between unit sampling procedures;
- The role of the interviewer in the survey process;
- Recommended methods for contacting potential respondents and procedures for setting appointments;
- Effective methods for gaining initial agreement to be interviewed;
- Methods for overcoming initial reluctance to schedule or agreement to be interviewed;
- Interviewer behavior in the interview setting — how to be courteous, neutral and non-intrusive;
- How to avoid biasing responses by verbal and non-verbal cues;
- How to ask and record closed-ended questions;
- How to probe and record open-ended questions;
- How to control irrelevancies and digressions without offending the respondent; and
- How to reassure respondents about the confidentiality of the information collected and the anonymity of survey respondents.

The field director in coordination with the project director develops special training manuals, audio-visual materials, and field kits for use in specific studies. Additional training materials would normally include: item-by-item interviewing specifications; decision algorithms for contact and

JAN 23 2001 12:44 AM FR DEWEY BALANTINE LLP:59 6033 TO 902916H559457#12 P.23

52434 5712

location procedures; procedures to maximize the probability of obtaining sensitive information from respondents; proper CATI recording procedures; and additional reporting and quality control requirements for the specific study.

Training Sessions

At the beginning of each study, all assigned field staff participate in a series of training sessions. Training may be thought of as being divided into two segments. The first phase of training requires review of the general principles of survey research and interviewing. The second phase of training deals specifically with the requirements of the study at hand. Operationally, both sets of information are covered simultaneously in training sessions. In these sessions the specific requirements of the study to be performed are used to breathe life into and to demonstrate how the general principles of survey research are actually operationalized.

The actual training was conducted by the SRBI project director and field director. Training sessions review not only general interviewing principles and unique study procedures and requirements, but also allow interviewers access to the CATI equipment and paper questionnaires both to gain familiarity with the survey instrument and to perform practice interviews. On most telephone surveys, the most critical issue is to ensure that the interviewer understands the questionnaire fully, so that the questions are asked properly and responses are recorded properly. Consequently, much of the training period was devoted to question-by-question specifications for the interview.

The first part of the training session was spent in ensuring that the interviewers fully understand the purpose of the project, the sample, the value of the research, and why we can't take no for an answer (and what we have to). After an explanation of the project, its importance and key issues, the project trainers discussed the specific contact, screening, and callback protocol to be used on this survey. We went through the specific contact procedures, contact and screening script and selection procedures to be used in this survey.

Next, we reviewed the questionnaire, the question-by-question specifications, and questions and problems that interviewers have about the survey instruments. The instrument was reviewed in detail. First, the trainers went through the hard copy version of the questionnaire - reviewing the questions, the probe instructions, the specifications, and contingent branching of the question and response series depending upon the previous answer. The next part of training was spent going through the CATI version of the questionnaire, on screen. This portion of the training is conducted as a round-robin exercise with interviewers reading the questions and recording the answers of one of the project staff. This familiarizes the interviewers with the appearance of the CATI screens, after they have already been familiarized with the hard copy instrument.

Next, the interviewers conducted practice interviews on the CATI system and the paper questionnaires. The supervisors batched the interviewers onto a test program. Half of the interviewers being trained acted as interviewers, while the other half acted as respondents. After completing an interview, the interviewer and the respondent reversed roles. The trainers and supervisors monitored the role-playing interviews. A final round robin session was held to be sure

JAN 23 2001 12:45 PM FR DEWEY BALLANTINE LLP 59 6336 01 5029165593972 P.24

52434 5713

BEST
COPY

4

that all of the interviewers understood the survey instruments and specifications, and that problems or questions identified in the role-playing sessions were illustrated and resolved.

The last part of the training session was spent with the training team going over problems or questions that had arisen during the practice interviews and answering any final questions. Once the training team was satisfied that the interviewers were prepared to begin interviewing, the first phase of the training ended. However, those interviewers who did not perform to the satisfaction of the trainers either underwent additional training or were dropped from the project.

After the first formal training session, interviewer performance was monitored and individual instructions were provided. At the end of the first week of interviewing, if significant problems developed, a second training session was held to correct deficiencies.

produced by RJRTC

in

HUMPHREY

JAN 23 2001 12:45 AM FR DEWEY BRLLANTINE LLP.59 6303 TO 982916#659497#12 P.25

52434 5714

BEST
COPY

produced by R.JRTC
in
HUMPHREY

APPENDIX E

SRH SURVEY FINAL DISPOSITION TABLE

JUN 29 2001 12:45 PM FR DELVEY BOLLANTINE LLP.59 6333 TO 9029164659497412 P.26

52434 5715

[illegible][illegible]

JAN 23 2001 12:46 AM FR. DEWEY BALLANTINE LLP.59 6333 TO 9829164659497#12 9.28

produced by RJRTC
in

HUMPHREY

SRBI SURVEY QUESTIONNAIRE

APPENDIX F

BEST
COPY

Questionnaire name: 9196
Page: 1

08/25/00 - 2:16 PM

produced by RJRTC

*** QUESTION # 1 ***
*SCHULMAN, RONCA & BUCOVALAS, INC. 145 EAST 32ND STREET, NY, NY
*NATIONAL SMOKERS SURVEY - #9196
*AUGUST 24, 2000

*SAMPLE READ-IN: PHONE (10 DIGITS)
GO TO Q. # 2 < 1 > {01}###
-- ANSWER REQUIRED --

*** QUESTION # 2 ***
*SAMPLE READ-IN: SEX REP (2 DIGITS)
GO TO Q. # 3 < 1 > {02}###
-- ANSWER REQUIRED --

*** QUESTION # 3 ***
*SAMPLE READ-IN: TIME ZONE (1 DIGIT)
GO TO Q. # 4 < 1 > *EASTERN
GO TO Q. # 4 < 2 > *CENTRAL
GO TO Q. # 4 < 3 > *MOUNTAIN
GO TO Q. # 4 < 4 > *PACIFIC
GO TO Q. # 4 < 5 > {03}###

*** QUESTION # 4 ***
*SAMPLE READ-IN: CENSUS DIV (1 DIGIT)
GO TO Q. # 5 < 1 > *NEW ENGLAND
GO TO Q. # 5 < 2 > *MID-ATLANTIC
GO TO Q. # 5 < 3 > *EAST NORTH CENTRAL
GO TO Q. # 5 < 4 > *WEST NORTH CENTRAL
GO TO Q. # 5 < 5 > *SOUTH ATLANTIC
GO TO Q. # 5 < 6 > *EAST SOUTH CENTRAL
GO TO Q. # 5 < 7 > *WEST SOUTH CENTRAL
GO TO Q. # 5 < 8 > *MOUNTAIN
GO TO Q. # 5 < 9 > *PACIFIC
GO TO Q. # 5 < 10 > {04}###

*** QUESTION # 5 ***
*SAMPLE READ-IN: REGION (1 DIGIT)
GO TO Q. # 6 < 1 > *NORTHEAST
GO TO Q. # 6 < 2 > *MID-WEST
GO TO Q. # 6 < 3 > *SOUTH
GO TO Q. # 6 < 4 > *WEST
GO TO Q. # 6 < 5 > {05}###

*** QUESTION # 6 ***
*SAMPLE READ-IN: FIPS (5 DIGITS)
GO TO Q. # 7 < 1 > {06}###
-- ANSWER REQUIRED --

*** QUESTION # 7 ***
*SAMPLE READ-IN: HSA (4 DIGITS)
GO TO Q. # 8 < 1 > {07}###

JAN 23 2001 12:45 PM FR DENEY BULLNTINE LLP.59 6333 TO 902916#5559497#12 P.29

52434 5718

BEST
COPY

Questionnaire name: 9196
Page: 2

08/25/00 - 2:16 PM

-- ANSWER REQUIRED --

*** QUESTION # 8 ***

*SAMPLE READ-IN: MSA/NON-MSA (1 DIGIT)

GO TO Q. # 9 ----- < 1 > *MSA
GO TO Q. # 9 ----- < 2 > *NON-MSA
GO TO Q. # 9 ----- < 3 > [08]###

*** QUESTION # 9 ***

*SAMPLE READ-IN: MSA 90 (4 DIGITS)

GO TO Q. # 10 ----- < 1 > [09]###

-- ANSWER REQUIRED --

*** QUESTION # 10 ***

*SAMPLE READ-IN: MSA/R CODE (1 DIGIT)

GO TO Q. # 11 ----- < 1 > *URBAN
GO TO Q. # 11 ----- < 2 > *SUBURBAN
GO TO Q. # 11 ----- < 3 > *RURAL
GO TO Q. # 11 ----- < 4 > [10]###

*** QUESTION # 11 ***

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 1 IS FULL (CONDITIONAL # 1)
AND Q# 5 EQ CODE(S) 1 (CONDITIONAL # 2)
THEN GO TO Q. # 13 ELSE GO TO Q. # 13.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 2 IS FULL (CONDITIONAL # 3)
AND Q# 5 EQ CODE(S) 2 (CONDITIONAL # 4)
THEN GO TO Q. # 13 ELSE GO TO Q. # 13.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 3 IS FULL (CONDITIONAL # 5)
AND Q# 5 EQ CODE(S) 3 (CONDITIONAL # 6)
THEN GO TO Q. # 13 ELSE GO TO Q. # 13.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 4 IS FULL (CONDITIONAL # 7)
AND Q# 5 EQ CODE(S) 4 (CONDITIONAL # 8)
THEN GO TO Q. # 13 ELSE GO TO Q. # 13.
*DUMMY QUESTION TO EVALUATE REGION QUOTAS
GO TO Q. # 12 ----- < 1 > #
GO TO Q. # 12 ----- < 2 > #

*** QUESTION # 12 ***

*DUMMY QUESTION

GO TO Q. # 13 ----- < 1 > #
GO TO Q. # 13 ----- < 2 > #

*** QUESTION # 13 ***

TELEPHONE: (01)###

Hello, I am (I)### calling from the SRBI
national public policy research center. We're conducting an important
national survey about problems facing the country and its communities.

JAN 23 2001 12:45 PM FR DEWEY BALLANTINE LLP 59 6303 TO 90291659497412 P.00

52434 5719

Produced by RJKTC

Questionnaire name: 9196 CB/25/00 - 2:16 PM

Page: 3

1> CONDUCT INTERVIEW

2> No answer

3> Answering machine

4> Busy signal

5> Initial callback

6> 1st/2nd REFUSAL (CB 52+ HOURS)

7> Away for duration

8> Disconnected phone/NIS

9> Business/Govt. phone

10> Fax/Computer tone

11> Language barrier

12> No one 18+ in H/H

16> 2ND/HARD REFUSAL

13> Health problem

14> Hearing problem

15> Call cannot be completed/line

1> CONDUCT INTERVIEW

2> No answer

3> Answering machine

4> Busy signal

5> Initial callback

6> 1st/2nd REFUSAL (CB 52+ HOURS)

7> Away for duration

8> Disconnected phone/Not in service

9> Business/Govt. phone

10> Fax/Computer tone

11> Language barrier

12> No one 18 years or older at number

13> Health problem

14> Hearing problem

15> Call cannot be completed/line problem

16> 2ND/HARD REFUSAL

DISP CODE # 1

DISP CODE # 2

DISP CODE # 3

DISP CODE # 4

DISP CODE # 5

DISP CODE # 6

DISP CODE # 7

DISP CODE # 8

DISP CODE # 9

DISP CODE # 10

DISP CODE # 11

DISP CODE # 12

DISP CODE # 13

DISP CODE # 14

DISP CODE # 15

DISP CODE # 16

DISP CODE # 17

DISP CODE # 18

DISP CODE # 19

DISP CODE # 20

GO TO Q. # 18

(CB 52+ HOURS)

GO TO Q. # 15

GO TO Q. # 16

GO TO Q. # 17

GO TO Q. # 18

GO TO Q. # 19

GO TO Q. # 20

GO TO Q. # 21

GO TO Q. # 22

GO TO Q. # 23

GO TO Q. # 24

GO TO Q. # 25

GO TO Q. # 26

GO TO Q. # 27

GO TO Q. # 28

GO TO Q. # 29

GO TO Q. # 30

GO TO Q. # 31

GO TO Q. # 32

GO TO Q. # 33

GO TO Q. # 34

GO TO Q. # 35

GO TO Q. # 36

GO TO Q. # 37

GO TO Q. # 38

GO TO Q. # 39

GO TO Q. # 40

GO TO Q. # 41

GO TO Q. # 42

GO TO Q. # 43

GO TO Q. # 44

GO TO Q. # 45

GO TO Q. # 46

GO TO Q. # 47

GO TO Q. # 48

GO TO Q. # 49

GO TO Q. # 50

GO TO Q. # 51

GO TO Q. # 52

GO TO Q. # 53

GO TO Q. # 54

GO TO Q. # 55

GO TO Q. # 56

GO TO Q. # 57

GO TO Q. # 58

GO TO Q. # 59

GO TO Q. # 60

GO TO Q. # 61

GO TO Q. # 62

GO TO Q. # 63

GO TO Q. # 64

GO TO Q. # 65

GO TO Q. # 66

GO TO Q. # 67

GO TO Q. # 68

GO TO Q. # 69

GO TO Q. # 70

GO TO Q. # 71

GO TO Q. # 72

GO TO Q. # 73

GO TO Q. # 74

GO TO Q. # 75

GO TO Q. # 76

GO TO Q. # 77

GO TO Q. # 78

GO TO Q. # 79

GO TO Q. # 80

GO TO Q. # 81

GO TO Q. # 82

GO TO Q. # 83

GO TO Q. # 84

GO TO Q. # 85

GO TO Q. # 86

GO TO Q. # 87

GO TO Q. # 88

GO TO Q. # 89

GO TO Q. # 90

GO TO Q. # 91

GO TO Q. # 92

GO TO Q. # 93

GO TO Q. # 94

GO TO Q. # 95

GO TO Q. # 96

GO TO Q. # 97

GO TO Q. # 98

GO TO Q. # 99

GO TO Q. # 100

GO TO Q. # 101

GO TO Q. # 102

GO TO Q. # 103

GO TO Q. # 104

GO TO Q. # 105

GO TO Q. # 106

GO TO Q. # 107

GO TO Q. # 108

GO TO Q. # 109

GO TO Q. # 110

GO TO Q. # 111

GO TO Q. # 112

GO TO Q. # 113

GO TO Q. # 114

GO TO Q. # 115

GO TO Q. # 116

GO TO Q. # 117

GO TO Q. # 118

GO TO Q. # 119

GO TO Q. # 120

GO TO Q. # 121

GO TO Q. # 122

GO TO Q. # 123

GO TO Q. # 124

GO TO Q. # 125

GO TO Q. # 126

GO TO Q. # 127

GO TO Q. # 128

GO TO Q. # 129

GO TO Q. # 130

GO TO Q. # 131

GO TO Q. # 132

GO TO Q. # 133

GO TO Q. # 134

GO TO Q. # 135

GO TO Q. # 136

GO TO Q. # 137

GO TO Q. # 138

GO TO Q. # 139

GO TO Q. # 140

GO TO Q. # 141

GO TO Q. # 142

GO TO Q. # 143

GO TO Q. # 144

GO TO Q. # 145

GO TO Q. # 146

GO TO Q. # 147

GO TO Q. # 148

GO TO Q. # 149

GO TO Q. # 150

GO TO Q. # 151

GO TO Q. # 152

GO TO Q. # 153

GO TO Q. # 154

GO TO Q. # 155

GO TO Q. # 156

GO TO Q. # 157

GO TO Q. # 158

GO TO Q. # 159

GO TO Q. # 160

GO TO Q. # 161

GO TO Q. # 162

GO TO Q. # 163

GO TO Q. # 164

GO TO Q. # 165

GO TO Q. # 166

GO TO Q. # 167

GO TO Q. # 168

GO TO Q. # 169

GO TO Q. # 170

GO TO Q. # 171

GO TO Q. # 172

GO TO Q. # 173

GO TO Q. # 174

GO TO Q. # 175

GO TO Q. # 176

GO TO Q. # 177

GO TO Q. # 178

GO TO Q. # 179

GO TO Q. # 180

GO TO Q. # 181

GO TO Q. # 182

GO TO Q. # 183

GO TO Q. # 184

GO TO Q. # 185

GO TO Q. # 186

GO TO Q. # 187

GO TO Q. # 188

GO TO Q. # 189

GO TO Q. # 190

GO TO Q. # 191

GO TO Q. # 192

GO TO Q. # 193

GO TO Q. # 194

GO TO Q. # 195

GO TO Q. # 196

GO TO Q. # 197

GO TO Q. # 198

GO TO Q. # 199

GO TO Q. # 200

GO TO Q. # 201

GO TO Q. # 202

GO TO Q. # 203

GO TO Q. # 204

GO TO Q. # 205

GO TO Q. # 206

GO TO Q. # 207

GO TO Q. # 208

GO TO Q. # 209

GO TO Q. # 210

GO TO Q. # 211

GO TO Q. # 212

GO TO Q. # 213

GO TO Q. # 214

GO TO Q. # 215

GO TO Q. # 216

GO TO Q. # 217

GO TO Q. # 218

GO TO Q. # 219

GO TO Q. # 220

GO TO Q. # 221

GO TO Q. # 222

GO TO Q. # 223

GO TO Q. # 224

GO TO Q. # 225

GO TO Q. # 226

GO TO Q. # 227

GO TO Q. # 228

GO TO Q. # 229

GO TO Q. # 230

GO TO Q. # 231

GO TO Q. # 232

GO TO Q. # 233

GO TO Q. # 234

GO TO Q. # 235

GO TO Q. # 236

GO TO Q. # 237

GO TO Q. # 238

GO TO Q. # 239

GO TO Q. # 240

GO TO Q. # 241

GO TO Q. # 242

GO TO Q. # 243

GO TO Q. # 244

GO TO Q. # 245

GO TO Q. # 246

GO TO Q. # 247

GO TO Q. # 248

GO TO Q. # 249

GO TO Q. # 250

GO TO Q. # 251

GO TO Q. # 252

GO TO Q. # 253

GO TO Q. # 254

GO TO Q. # 255

GO TO Q. # 256

GO TO Q. # 257

GO TO Q. # 258

GO TO Q. # 259

GO TO Q. # 260

GO TO Q. # 261

TO MAKE SURE YOU INCLUDE ANY INFORMATION ABOUT YOUR BUSINESS.

BEST
COPY

-S1- May I please speak to this person?
GO TO Q. # 22 ----> < 1 > Continue with current respondent
GO TO Q. # 21 ----> < 2 > New respondent brought to phone
DISP CODE # 29 ----> < 3 > New respondent not available (SCHEDULE
CALLBACK)
GO TO Q. # 20 ----> < 4 > Refused

*** QUESTION # 16 ***

Questionnaire name: 9196
Page: 4

08/23/00 - 2:16 PM

-304=2 / DORNY QUESTION TO ROTATE READ-IN SELECTION

GO TO Q. # 17 ----> < 1 > younger

GO TO Q. # 17 ----> < 2 > older

-- SPECIAL FEATURE * SHUFFLING ANSWERS
ALL ANSWERS --

*** QUESTION # 17 ***

-S2- May I please speak with the [Q16]### of these two people?

GO TO Q. # 22 ----> < 1 > Continue with current respondent

GO TO Q. # 21 ----> < 2 > New respondent brought to phone

DISP CODE # 29 ----> < 3 > New respondent not available (SCHEDULE
CALLBACK)

GO TO Q. # 20 ----> < 4 > Refused

*** QUESTION # 18 ***

-3-4=3 / DORNY QUESTION TO ROTATE READ-IN SELECTION

GO TO Q. # 19 ----> < 1 > has had the most recent birthday

GO TO Q. # 19 ----> < 2 > will have the next birthday

-- SPECIAL FEATURE * SHUFFLING ANSWERS
ALL ANSWERS --

*** QUESTION # 19 ***

-S6- May I please speak to the person 18 or older who
[Q18]###?

GO TO Q. # 22 ----> < 1 > Continue with current respondent

GO TO Q. # 21 ----> < 2 > New respondent brought to phone

DISP CODE # 29 ----> < 3 > New respondent not available (SCHEDULE
CALLBACK)

GO TO Q. # 20 ----> < 4 > Refused

*** QUESTION # 20 ***

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

IF Q# 14 EQ CODE(S) 13,14 (CONDITIONAL # 9)

THEN SHOW CODES 1

AND HIDE CODES 2-4

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

IF Q# 15 EQ CODE(S) 4 (CONDITIONAL # 10)

THEN SHOW CODES 2

AND HIDE CODES 1,3,4

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

IF Q# 17 EQ CODE(S) 4 (CONDITIONAL # 11)

THEN SHOW CODES 3

AND HIDE CODES 1,2,4

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

JAN 23 2001 12:47 AM FR DEWEY BALLPINE LLP.59 6030 10 902916R559497#12 P.32

52434 5721

JAN 23 2001 12:47 AM FR DEWEY BALLANTINE LLP.59 6333 TO 9029164659497412 P 33

Produced by RJRT C

IF OF 19 EQ CODE(S) 4
THEN SHOW CODES 4
AND HIDE CODES 1-3
Thank you for your time.
(ENTER PUNCH SHOWN BELOW TO EXIT CALL)
DISP CODE # 10 < 1 > S/O "Q.304 - DR/RET ADULTS 18+ IN
HOUSEHOLD
DISP CODE # 11 < 2 > S/O .51 - REJECTED QUALIFIED RESPONDENT
DISP CODE # 12 < 3 > S/O .52 - REJECTED QUALIFIED RESPONDENT
DISP CODE # 13 < 4 > S/O .56 - REJECTED QUALIFIED RESPONDENT
GO TO Q. # 21 < 5 > .
Questionnaire name: 9196
Page: 5
08/25/00 - 2:16 PM
... QUESTION # 21 ...
NEW RESP INFO
TELEPHONE: (01)111
Hello, I am calling from the S&H
national public policy research center. We're conducting an important
national survey about problems facing the country and its communities.
GO TO Q. # 22 < 1 > CONDUCT INTERVIEW
DISP CODE # 12 < 3 > No answer
DISP CODE # 13 < 4 > Answering machine
DISP CODE # 14 < 5 > Busy signal
DISP CODE # 15 < 6 > Qualified Respondent callback
DISP CODE # 16 < 7 > 1ST/3RD RECALL (CB 52+ WORKS)
DISP CODE # 17 < 8 > Health problem
DISP CODE # 18 < 9 > Health problem
DISP CODE # 19 < 10 > Call cannot be completed/line problem
DISP CODE # 20 < 11 > 2ND/HARD RECALL
... QUESTION # 22 ...
-Q.315- ENTER GENDER OF RESPONDENT
GO TO Q. # 23 < 1 > Male
GO TO Q. # 23 < 2 > Female
... QUESTION # 23 ...
DO NOT QUESTION TO SELECT ORDER OF ANSWERS / SHUFFLE AND
GO TO Q. # 24 < 1 > IN ORDER
GO TO Q. # 24 < 2 > REVERSE
-- SPECIAL FEATURE - SHUFFLING ANSWERS
ALL ANSWERS
... QUESTION # 24 ...
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF 0001A GROUP # 1 CELL # 5 IS FULL
AND OF 23 EQ CODE(S) 1
THEN GO TO Q. # 23 ELSE GO TO Q. # 25.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF 0001A GROUP # 1 CELL # 6 IS FULL
AND OF 23 EQ CODE(S) 2
THEN GO TO Q. # 23 ELSE GO TO Q. # 25.
(CONDITIONAL # 13)
(CONDITIONAL # 14)
(CONDITIONAL # 15)
(CONDITIONAL # 16)

produced by R.J.R.T.C.

[illegible]

BEST COPY

BEST
COPY

*** QUESTION # 28 ***
DUMMY QUESTION Q.103 ANSWERS / MULTI / SHOW & HIDE
GO TO Q. # 29 ----> < 1 > 1> Extremely unhappy,
GO TO Q. # 29 ----> < 2 > 2> Very unhappy,
GO TO Q. # 29 ----> < 3 > 3> Somewhat unhappy, or
GO TO Q. # 29 ----> < 4 > 4> Slightly unhappy?
GO TO Q. # 29 ----> < 5 > 4> Slightly unhappy,
GO TO Q. # 29 ----> < 6 > 3> Somewhat unhappy,
GO TO Q. # 29 ----> < 7 > 2> Very unhappy, or
GO TO Q. # 29 ----> < 8 > 1> Extremely unhappy?
-- MULTI-PUNCH --

-- THIS QUESTION IS IN A GRID --
DISPLAY ANSWERS ALREADY MENTIONED IN QUESTIONS:
27

*** QUESTION # 29 ***

Questionnaire name: #196
Page: 7

05/25/00 - 2:16 PM

DUMMY QUESTION Q.106 ANSWERS / MULTI / SHOW & HIDE
GO TO Q. # 30 ----> < 1 > 1> Definitely will try,
GO TO Q. # 30 ----> < 2 > 2> Probably will try,
GO TO Q. # 30 ----> < 3 > 3> May or may not try,
GO TO Q. # 30 ----> < 4 > 4> Probably will not try, or
GO TO Q. # 30 ----> < 5 > 5> Definitely will not try?
GO TO Q. # 30 ----> < 6 > 5> Definitely will not try,
GO TO Q. # 30 ----> < 7 > 4> Probably will not try,
GO TO Q. # 30 ----> < 8 > 3> May or may not try,
GO TO Q. # 30 ----> < 9 > 2> Probably will try, or
GO TO Q. # 30 ----> < 10 > 1> Definitely will try?
-- MULTI-PUNCH --

-- THIS QUESTION IS IN A GRID --
DISPLAY ANSWERS ALREADY MENTIONED IN QUESTIONS:
25

*** QUESTION # 30 ***

QUESTIONNAIRE

Let's begin with some general questions.

-Q.1- First, how would you describe the quality of health care that
most Americans receive these days... (READ CHOICES)

GO TO Q. # 32 ----> < 1 > Excellent,
GO TO Q. # 32 ----> < 2 > Very good,
GO TO Q. # 32 ----> < 3 > Good,
GO TO Q. # 32 ----> < 4 > Fair, or
GO TO Q. # 32 ----> < 5 > Poor?
GO TO Q. # 31 ----> < 6 > (VOL) Don't know
GO TO Q. # 32 ----> < 7 > (VOL) Refused

*** QUESTION # 31 ***
(Q.1 - Don't know)

JAN 25 2001 12:47 AM FR DEWEY BALLANTINE LLP 59 6033 TO 9025164859497412 P.25

52434 5724

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.1A- First, how would you describe the quality of health care that most Americans receive these days... (READ CHOICES)

- GO TO Q. 132 -> < 1 > Excellent,
- GO TO Q. 132 -> < 2 > Very good,
- GO TO Q. 132 -> < 3 > Good,
- GO TO Q. 132 -> < 4 > Fair, or
- GO TO Q. 132 -> < 5 > Poor?
- GO TO Q. 132 -> < 6 > (VOL) Don't know
- GO TO Q. 132 -> < 7 > (VOL) Refused

--- QUESTION 132 ---

-Q.2- And how would you describe the job President Clinton has done in handling health care issues during his presidency... (READ CHOICES)

- GO TO Q. 133 -> < 1 > Excellent,
- GO TO Q. 133 -> < 2 > Very good,

Questionnaire name: 5196
Page: 8

01/25/00 - 1:16 PM

- GO TO Q. 134 -> < 3 > Good,
- GO TO Q. 134 -> < 4 > Fair, or
- GO TO Q. 134 -> < 5 > Poor?
- GO TO Q. 134 -> < 6 > (VOL) Don't know
- GO TO Q. 134 -> < 7 > (VOL) Refused

--- QUESTION 133 ---

(Q.2 = Description)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.1A- And how would you describe the job President Clinton has done in handling health care issues during his presidency... (READ CHOICES)

- GO TO Q. 134 -> < 1 > Excellent,
- GO TO Q. 134 -> < 2 > Very good,
- GO TO Q. 134 -> < 3 > Good,
- GO TO Q. 134 -> < 4 > Fair, or
- GO TO Q. 134 -> < 5 > Poor?
- GO TO Q. 134 -> < 6 > (VOL) Don't know
- GO TO Q. 134 -> < 7 > (VOL) Refused

--- QUESTION 134 ---

Next, some questions about you personally.

-Q.3- First, during the last 7 days, have you smoked 5 cigarettes or more?

- GO TO Q. 135 -> < 1 > Yes

JAN 23 2001 12:48 AM FR DEWEY BALLANTINE LLP.59 6333 TO 9828165594497412 06

BEST
COPY

GO TO Q. # 34 ----- < 2 > Me
GO TO Q. # 35 ----- < 3 > Don't know
GO TO Q. # 36 ----- < 4 > Refused

*** QUESTION # 35 ***
(Q.3 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.3A- First, during the last 7 days, have you smoked 5 cigarettes or more?

GO TO Q. # 36 ----- < 1 > Yes
GO TO Q. # 36 ----- < 2 > No
GO TO Q. # 36 ----- < 3 > Don't know
GO TO Q. # 36 ----- < 4 > Refused

*** QUESTION # 36 ***

-Q.4- And during your entire life, have you smoked 100 cigarettes or more?

GO TO Q. # 37 ----- < 1 > Yes
GO TO Q. # 37 ----- < 2 > No
GO TO Q. # 37 ----- < 3 > Don't know

Questionnaire name: 9196
Page: 9

08/25/00 - 2:16 PM

GO TO Q. # 38 ----- < 4 > Refused

*** QUESTION # 37 ***
(Q.4 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.4A- And during your entire life, have you smoked 100 cigarettes or more?

GO TO Q. # 38 ----- < 1 > Yes
GO TO Q. # 38 ----- < 2 > No
GO TO Q. # 38 ----- < 3 > Don't know
GO TO Q. # 38 ----- < 4 > Refused

*** QUESTION # 38 ***

Thank you for your time. These are all the questions I have.

(ENTER POWER NUMBER BELOW TO EXIT CALL)

DISP CODE # 34 ----- < 1 > S/U -Q.4/EA-MO/DE/RES SMOKED
DISP CODE # 34 ----- < 2 > "

*** QUESTION # 39 ***

-Q.10 / GROUP QUESTION TO SELECT GROUP / SHUFFLE ALL AND
GO TO Q. # 40 ----- < 1 > GROUP A

Produced by RJRTC

JAN 23 2001 12:48 AM FR DEWEY BALUNLINE LLP.S9 6333 TO 902916H655949712

52434 5726

BEST COPY

```

GO TO Q. 8 41 ===== < 3 > GROUP B
GO TO Q. 8 42 ===== < 3 > GROUP C
GO TO Q. 8 43 ===== < 4 > GROUP D
-- SPECIAL FEATURE - SHUFFLING ANSWERS
ALL ANSWERS --

*** QUESTION # 40 ***
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 7 IS FULL (CONDITIONAL # 21)
AND Q# 39 EQ CODE(S) 1 (CONDITIONAL # 22)
THEN GO TO Q. 8 39 ELSE GO TO Q. 8 41.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 8 IS FULL. (CONDITIONAL # 23)
AND Q# 39 EQ CODE(S) 2 (CONDITIONAL # 24)
THEN GO TO Q. 8 39 ELSE GO TO Q. 8 41.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 9 IS FULL (CONDITIONAL # 25)
AND Q# 39 EQ CODE(S) 3 (CONDITIONAL # 26)
THEN GO TO Q. 8 39 ELSE GO TO Q. 8 41.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF QUOTA GROUP # 1 CELL # 10 IS FULL (CONDITIONAL # 27)
AND Q# 39 EQ CODE(S) 4 (CONDITIONAL # 28)
THEN GO TO Q. 8 39 ELSE GO TO Q. 8 41.
DUMPY QUESTION TO EVALUATE GROUP QUOTAS
GO TO Q. 8 41 ===== < 1 > E
GO TO Q. 8 41 ===== < 2 > F

*** QUESTION # 41 ***

```

Questionnaire name: 9196 DB/25/00 - 2:15 PM
Page: 10

```

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 39 EQ CODE(S) 2 (CONDITIONAL # 29)
THEN GO TO Q. 8 41 ELSE GO TO Q. 8 42.
GROUP B
Q.20- Now, I'd like to read you some statements and ask whether you
probably heard or read each one before today or probably did NOT hear
or read each one.
(PRESS RIGHT ARROW TO CONTINUE)
GO TO Q. 8 42 ===== < 1 > TEXT SCREEN
-- TEXT SCREEN --

*** QUESTION # 42 ***
-Q.21- The following statement has been printed on some packages of
cigarettes. It says: QUOTE. Smoking causes lung cancer, heart
disease,
emphysema, and may complicate pregnancy. END QUOTE.
Do you think you probably did hear or read that statement before
today, or do you think you probably did NOT hear or read it?
GO TO Q. 8 43 ===== < 1 > Probably did
GO TO Q. 8 44 ===== < 2 > Probably did NOT
GO TO Q. 8 45 ===== < 3 > (VOL) Don't know
GO TO Q. 8 46 ===== < 4 > (VOL) Refused

```

JAN 23 2001 12:48 PM FR DEWEY BRILLIANT LLP 59 6333 TO 982915H6559487M12 P.08

produced by RJRTC

52434 5727

BEST COPY

produced by RJRTTC

*** QUESTION # 43 ***

(Q.21 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.21a- The first statement has been printed on some packages of cigarettes. It says: QUOTE. Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 44 ----- < 1 > Probably did
GO TO Q. # 44 ----- < 2 > Probably did NOT
GO TO Q. # 44 ----- < 3 > (VOL) Don't know
GO TO Q. # 44 ----- < 4 > (VOL) Refused

*** QUESTION # 44 ***

-Q.22- The next statement was made in 1979 by the Surgeon General of the United States, whose job in the federal government is to protect and advance the health of all Americans. He said: QUOTE. Cigarette smoking is strongly (CAUSE-ALY) related to lung cancer in both men and women. The risk of developing lung cancer is increased with increasing dosage of smoking. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 45 ----- < 1 > Probably did
GO TO Q. # 45 ----- < 2 > Probably did NOT

Questionnaire Name: 9194

08/25/00 - 2:15 PM

Page: 11

GO TO Q. # 43 ----- < 1 > (VOL) Don't know
GO TO Q. # 43 ----- < 4 > (VOL) Refused

*** QUESTION # 45 ***

(Q.22 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.22a- The next statement was made in 1979 by the Surgeon General of the United States, whose job in the federal government is to protect and advance the health of all Americans. He said: QUOTE. Cigarette smoking is strongly (CAUSE-ALY) related to lung cancer in both men and women. The risk of developing lung cancer is increased with increasing dosage of smoking. END QUOTE.

JAN 23 2001 12:48 PM FR DEWEY BILLPLINE LLP.S9 8333 TO 9829168659497#12 P 19

52434 5728

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?
 GO TO Q. 8 48 ----> < 1 > Probably did
 GO TO Q. 8 46 ----> < 2 > Probably did NOT
 GO TO Q. 8 46 ----> < 3 > (VOL) Don't know
 GO TO Q. 8 46 ----> < 4 > (VOL) Refused

--- QUESTION 8 46 ---

-Q.22 The last statement was made in 1964 in a report of the Advisory Committee on the Surgeon General. The statement is: QUOTE: The risk of developing lung cancer increases with duration of smoking and the number of cigarettes smoked per day. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?
 GO TO Q. 8 48 ----> < 1 > Probably did
 GO TO Q. 8 46 ----> < 2 > Probably did NOT
 GO TO Q. 8 46 ----> < 3 > (VOL) Don't know
 GO TO Q. 8 46 ----> < 4 > (VOL) Refused

--- QUESTION 8 47 ---

(Q.23 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I ask you question one more time?

-Q.23a The last statement was made in 1964 in a report of the Advisory Committee on the Surgeon General. The statement is: QUOTE: The risk of developing lung cancer increases with duration of smoking and the number of cigarettes smoked per day. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?
 GO TO Q. 8 48 ----> < 1 > Probably did
 GO TO Q. 8 46 ----> < 2 > Probably did NOT

Questionnaire Name: 9196
 Page: 12

00/25/00 2:16 PM

GO TO Q. 8 46 ----> < 3 > (VOL) Don't know
 GO TO Q. 8 46 ----> < 4 > (VOL) Refused

--- QUESTION 8 48 ---

<< COMPLETION ASSOCIATED WITH THIS QUESTION >>

IF Q8 48 EQ CODE(S) 3

(CONDITIONAL 8 30)

THEN GO TO Q. 8 48 ELSE GO TO Q. 8 55.

END OF C

-Q.30- Next, I'd like to read you some statements and ask whether you

JAN 23 2001 12:49 AM FR DEWEY BILLING LINE LLP 59 6033 TO 9229168659497812

probably heard or read each one before today or probably did NOT hear or read each one.

(PRESS ENTER TWICE TO CONTINUE)

GO TO Q. # 43 ==> < 1 > TEXT SCREEN

-- TEXT SCREEN --

--- QUESTION # 43 ---

-Q.41- The first statement was made in 1933 by an R. J. Reynolds Tobacco Company employee in a report written for that company. The report said, "QDOTT. Studies of clinical data tend to confirm the relationship between heavy and prolonged tobacco smoking and incidence of cancer of the lung."

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 42 ==> < 1 > Probably did
GO TO Q. # 41 ==> < 2 > Probably did NOT
GO TO Q. # 40 ==> < 3 > (VOL) Don't know
GO TO Q. # 39 ==> < 4 > (VOL) Refused

--- QUESTION # 40 ---

(Q.39 - Refused)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I ask the question one more time?

-Q.41A- The first statement was made in 1933 by an R. J. Reynolds Tobacco Company employee in a report written for that company. The report said, "QDOTT. Studies of clinical data tend to confirm the relationship between heavy and prolonged tobacco smoking and incidence of cancer of the lung." TWO QDOTT.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 41 ==> < 1 > Probably did
GO TO Q. # 40 ==> < 2 > Probably did NOT
GO TO Q. # 39 ==> < 3 > (VOL) Don't know
GO TO Q. # 38 ==> < 4 > (VOL) Refused

--- QUESTION # 41 ---

-Q.37- The first statement was printed recently in newspaper advertisement by Philip Morris USA, which is a tobacco company. It says: "QDOTT. ... cigarette smoking causes lung cancer, heart

Questionnaire name: 9496

08/25/00 - 2:16 PM

Page: 13

disease, emphysema, and other serious diseases in smokers. Smokers are far more likely to develop serious diseases, like lung cancer,

JAN 23 2001 12:49 PM FR DEMEY BALLANTINE LLP.SB 6333 TO 982916R559497H12 P.41

BEST
COPY

than non-smokers. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 53 --- < 1 > Probably did
GO TO Q. 53 --- < 2 > Probably did NOT
GO TO Q. 53 --- < 3 > (VOL) Don't know
GO TO Q. 53 --- < 4 > (VOL) Refused

*** QUESTION 52 ***
(Q.52 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.52A- The next statement was printed recently in newspaper advertisements by Philip Morris Inc., which is a tobacco company. It says: QUOTE. ... cigarette smoking causes lung cancer, heart disease, emphysema, and other serious diseases in smokers. Smokers are far more likely to develop serious diseases, like lung cancer, than non-smokers. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 53 --- < 1 > Probably did
GO TO Q. 53 --- < 2 > Probably did NOT
GO TO Q. 53 --- < 3 > (VOL) Don't know
GO TO Q. 53 --- < 4 > (VOL) Refused

*** QUESTION 53 ***

-Q.53- The last statement was made recently by the chairman and chief executive officer of Brown and Williamson Tobacco Corporation. He said:

QUOTE. ... with the judgment of public health authorities that smoking is a cause of lung cancer. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 54 --- < 1 > Probably did
GO TO Q. 54 --- < 2 > Probably did NOT
GO TO Q. 54 --- < 3 > (VOL) Don't know
GO TO Q. 54 --- < 4 > (VOL) Refused

*** QUESTION 54 ***
(Q.54 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.54A- The last statement was made recently by the chairman and chief

Questionnaire name: 9196

06/25/08 - 2:16 PM

Page: 14

JAN 23 2001 12:49 PM FR DEWEY BRILLANTINE LLP 59 B033 TO 902915M6559497M12 P. 42

52434 5731

executive officer of Brown and Williamson Tobacco Corporation. He said:
 QUOTE. We agree with the judgment of public health authorities that smoking is a cause of lung cancer. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 48 ----- < 1 > Probably did
 GO TO Q. 48 ----- < 2 > Probably did NOT
 GO TO Q. 48 ----- < 3 > (VOL) Don't know
 GO TO Q. 48 ----- < 4 > (VOL) Refused

*** QUESTION # 55 ***

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

IF Q1 IS SQ CODE(6) :

[CONDITIONAL # 32]

THEN GO TO Q. 53 ELSE GO TO Q. 48.

GROUP 8

-Q.40- Well, I'd like to read you some statements and ask whether you probably heard or read each one before today or probably did NOT hear or read it.

(PLEASE ENTER TWICE TO CONTINUE)

GO TO Q. 48 ----- < 1 > TEXT SCREEN

--- TEXT SCREEN ---

*** QUESTION # 46 ***

-Q.41- The first statement has been printed on some packages of cigarettes. It says: QUOTE. Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 48 ----- < 1 > Probably did
 GO TO Q. 48 ----- < 2 > Probably did NOT
 GO TO Q. 48 ----- < 3 > (VOL) Don't know
 GO TO Q. 48 ----- < 4 > (VOL) Refused

*** QUESTION # 57 ***

(Q. 41 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.41A The first statement has been printed on some packages of cigarettes. It says: QUOTE. Smoking causes lung cancer, heart disease, emphysema, and may complicate pregnancy. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 48 ----- < 1 > Probably did
 GO TO Q. 48 ----- < 2 > Probably did NOT

JAN 23 2001 12:49 AM FR DEWEY BALLANTINE LLP 59 6000 TO 9029164559497412 P. 12

BEST
COPY

GO TO Q. 58 --> < 3 > (VOL) Don't know
GO TO Q. 58 --> < 4 > (VOL) Refused

--- QUESTION # 58 ---

Questionnaire name: 0196
Page: 10

08/25/00 - 2:16 PM

-Q.47- The second statement was made in 1979 by the Surgeon General of the United States, whose job in the federal government is to protect and advance the health of all Americans. He said: QUOTE. Cigarette smoking is causally [CAUSE-ALY] related to lung cancer in both men and women. The risk of developing lung cancer is increased with increasing dosages of smoking. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 58 --> < 1 > Probably did
GO TO Q. 58 --> < 2 > Probably did NOT
GO TO Q. 58 --> < 3 > (VOL) Don't know
GO TO Q. 58 --> < 4 > (VOL) Refused

--- QUESTION # 49 ---

(Q.42 = "Don't know")

I'll make a guess of that. It would really help us a lot if I could also get your BEST GUESSES, even if you're not completely sure.

Shall I read the question one more time?

-Q.47A- The second statement was made in 1979 by the Surgeon General of the United States, whose job in the federal government is to protect and advance the health of all Americans. He said: QUOTE. Cigarette smoking is causally [CAUSE-ALY] related to lung cancer in both men and women. The risk of developing lung cancer is increased with increasing dosages of smoking. END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. 58 --> < 1 > Probably did
GO TO Q. 58 --> < 2 > Probably did NOT
GO TO Q. 58 --> < 3 > (VOL) Don't know
GO TO Q. 58 --> < 4 > (VOL) Refused

--- QUESTION # 48 ---

-Q.43- The first statement was made in 1964 in a report of the Advisory Committee to the Surgeon General. The statement is: QUOTE. The risk of

JAN 23 2001 12:49 PM FR DEVEY BRLNLINE LLP.59 6033 TO 902916X559497812

Produced by RJRTC

52434 5733

developing lung cancer increases with duration of smoking and the number of cigarettes smoked per day. END Q001E.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 42 ----- < 1 > Probably did
GO TO Q. # 43 ----- < 2 > Probably did NOT
GO TO Q. # 41 ----- < 3 > (VOL) Don't know
GO TO Q. # 44 ----- < 4 > (VOL) Refused

--- QUESTION # 41 ---
(Q.43 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESSES, even if you're not completely sure.

Questionnaire name: 9196
Page: 16

08/25/00 - 2:16 PM

Shall I read the question one more time?

Q.43A- The third statement was made in 1966 in a report of the Advisory Committee to the Surgeon General. The statement is: Q001E. The risk of developing lung cancer increases with duration of smoking and the number of cigarettes smoked per day. END Q001E.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 42 ----- < 1 > Probably did
GO TO Q. # 43 ----- < 2 > Probably did NOT
GO TO Q. # 41 ----- < 3 > (VOL) Don't know
GO TO Q. # 44 ----- < 4 > (VOL) Refused

--- QUESTION # 42 ---

Q.44- The next statement was made in 1993 by an R. J. Reynolds tobacco company employee in a report written for that company. The report said, Q002E. Studies of clinical data tend to confirm the relationship between heavy and prolonged tobacco smoking and incidence of cancer of the lung. END Q002E.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 44 ----- < 1 > Probably did
GO TO Q. # 45 ----- < 2 > Probably did NOT
GO TO Q. # 43 ----- < 3 > (VOL) Don't know
GO TO Q. # 46 ----- < 4 > (VOL) Refused

JAN 23 2001 12:58 AM FR DEXEY BALLANTINE LLP 55 8003 TO 902916M559497M12 11 5

*** QUESTION # 63 ***
(Q.44 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.44A- The next statement was made in 1963 by an R. J. Reynolds Tobacco Company employee in a report written for that company. The report said,

QUOTE. Studies of clinical data tend to confirm the relationship between heavy and prolonged tobacco smoking and incidence of cancer of the lung.

END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 64 < 1 > Probably did
GO TO Q. # 64 < 2 > Probably did NOT
GO TO Q. # 64 < 3 > (VOL) Don't know
GO TO Q. # 64 < 4 > (VOL) Refused

*** QUESTION # 64 ***

-Q.45- The next statement was printed recently in newspaper advertisements by Phillip Morris USA, which is a tobacco company. It says: QUOTE. Cigarette smoking causes lung cancer, heart disease, emphysema, and other serious diseases in smokers. Smokers are far more likely to develop serious diseases, like lung cancer, than non-smokers.

Questionnaire name: 9196
Page: 17

08/29/00 - 2:14 PM

END QUOTE.

Do you think you probably did hear or read that statement before today, or do you think you probably did NOT hear or read it?

GO TO Q. # 66 < 1 > Probably did
GO TO Q. # 66 < 2 > Probably did NOT
GO TO Q. # 66 < 3 > (VOL) Don't know
GO TO Q. # 66 < 4 > (VOL) Refused

*** QUESTION # 65 ***
(Q.45 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your best GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.45A- The next statement was printed recently in newspaper advertisements by Phillip Morris USA, which is a tobacco company. It

JAN 23 2001 12:50 AM FR DREWY BRLLINE LLP.59 6333 TO 902916M65949712 8.46

BEST
COPY

... cigarette smoking causes lung cancer, heart disease,
emphysema, and other serious diseases in smokers. Smokers are far
more likely to develop serious diseases, like lung cancer, than non-
smokers:
END QUOTE.

Do you think you probably did hear or read that statement before
today, or do you think you probably did NOT hear or read it?

GO TO Q. 66 ——— < 1 > Probably did
GO TO Q. 66 ——— < 2 > Probably did NOT
GO TO Q. 66 ——— < 3 > (VOL) Don't know
GO TO Q. 66 ——— < 4 > (VOL) Refused

--- QUESTION 66 ---

-Q.66- The last statement was made recently by the chairman and chief
executive officer of Brown and Williamson Tobacco Corporation. He
said,

QUOTE. We agree with the judgment of public health authorities that
smoking is a cause of lung cancer. END QUOTE.

Do you think you probably did hear or read that statement before
today, or do you think you probably did NOT hear or read it?

GO TO Q. 66 ——— < 1 > Probably did
GO TO Q. 66 ——— < 2 > Probably did NOT
GO TO Q. 66 ——— < 3 > (VOL) Don't know
GO TO Q. 66 ——— < 4 > (VOL) Refused

--- QUESTION 67 ---

(Q.67 = Don't know)

I'll make a note of that. It would really help us a lot if I could
also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.67A- The last statement was made recently by the chairman and chief
executive officer of Brown and Williamson Tobacco Corporation. He
said,

QUOTE. We agree with the judgment of public health authorities that

Questionnaire Number 9195
Page: 18

08/25/00 - 2:16 PM

Smoking is a cause of lung cancer. END QUOTE.

Do you think you probably did hear or read that statement before
today, or do you think you probably did NOT hear or read it?

GO TO Q. 66 ——— < 1 > Probably did
GO TO Q. 66 ——— < 2 > Probably did NOT
GO TO Q. 66 ——— < 3 > (VOL) Don't know
GO TO Q. 66 ——— < 4 > (VOL) Refused

--- QUESTION 68 ---

ASK EVERYONE

JAN 23 2001 12:58 AM FR DEWEY BALLANTINE LLP 59 6033 TO 902916H559487M12

52434 5736

BEST
COPY

-Q.50- Next, I'd like to turn to a different topic: what you
PERSONALLY
think about the effect of cigarette smoking on people's health. I'm
going to read these next two questions very slowly to let you think
about each part of them, and I can repeat each question as many times
as you like before you answer, so you can be sure they are clear to
you.

(PRESS ENTER TWICE TO CONTINUE)
GO TO Q. # 69 ----> < 1 > TEXT SCREEN
-- TEXT SCREEN --

--- QUESTION # 69 ---
(READ VERY SLOWLY)

-Q.51- First, if we were to randomly choose, one-thousand American
adults, who never smoked cigarettes AT ALL during their lives, how
many
of these one-thousand people do you think would get lung cancer
sometimes
during their lives?

(ENTER A NUMBER BETWEEN 0-1000; Don't Know = 1001; Refused = 1002)

(INTERVIEWER ALWAYS READ BACK TO RESPONDENT:

"That is... of one thousand?")

GO TO Q. # 70 ----> < 1 > NUMERIC OPEN END (0-1002)

-- NUMERIC OPEN END RANGE IS 0. FROM 1002.--

--- QUESTION # 70 ---

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 69 EQ 1001 TO 1001 (CONDITIONAL # 22)

THEN GO TO Q. # 70 ELSE GO TO Q. # 72.

(Q.51 - Don't know)

I'll make sure of that. If you don't mind, it would really help us
a lot if you also get your NEXT GUESS, even if you're not
immediately
sure.

Shall I read you question one more time?

-Q.51A- Now, if we were to randomly choose, one-thousand American
adults, who never smoked cigarettes AT ALL during their lives, how
many
of these one-thousand people do you think would get lung cancer
sometimes
during their lives?

(ENTER A NUMBER BETWEEN 0-1000; Don't Know = 1001; Refused = 1002)

Questionnaire name: 5106
Page: 19

08/23/00 - 2:16 PM

JAN 23 2001 12:58 AM FR DEWEY BALLANTINE LLP.S9 6303 TO 9029168559497M12 488

52434 5737

BEST
COPY

(INTERVIEWER: ALWAYS READ BACK TO RESPONDENT.
 "That is, ___ out of one thousand!")
 GO TO Q. 71 ----> < 1 > NUMERIC OPEN END (0-1002)
 -- NUMERIC OPEN END - RANGE IS 0. THRU 1002.--
 -- ANSWER REQUIRED --

--- QUESTION # 71 ---
 *CURRENT QUESTION
 GO TO Q. 72 ----> < 1 > ASKED Q. 51A
 GO TO Q. 72 ----> < 2 > 8

--- QUESTION # 72 ---
 (READ VERY SLOWLY)

-Q. 72- And if we were to randomly choose one-thousand American adults, who each smoked one pack of cigarettes a day, every day for 20 years starting when they were 20 years old, how many of these one-thousand people, do you think would get lung cancer sometime during their lives?

(ENTER A NUMBER BETWEEN 0-1000; Don't Know = 1001; Refused = 1002)

(INTERVIEWER: ALWAYS READ BACK TO RESPONDENT:
 "That is, ___ out of one thousand!")
 GO TO Q. 73 ----> < 1 > NUMERIC OPEN END (0-1002)
 -- NUMERIC OPEN END - RANGE IS 0. THRU 1002.--
 -- ANSWER REQUIRED --

--- QUESTION # 73 ---
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF 0.57 = 1001 TO 1001 (CONDITIONAL # 33)
 THEN GO TO Q. 73 ELSE GO TO Q. 75.
 (0.57 = Don't know)

I'll make a note of that. If you don't mind, it would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q. 72A- And if we were to randomly choose one-thousand American adults, who each smoked one pack of cigarettes a day, every day for 20 years starting when they were 20 years old, how many of these one-thousand people, do you think would get lung cancer sometime during their lives?

(ENTER A NUMBER BETWEEN 0-1000; Don't Know = 1001; Refused = 1002)

(INTERVIEWER: ALWAYS READ BACK TO RESPONDENT:
 "That is, ___ out of one thousand!")
 GO TO Q. 74 ----> < 1 > NUMERIC OPEN END (0-1002)
 -- NUMERIC OPEN END - RANGE IS 0. THRU 1002.--
 -- ANSWER REQUIRED --

--- QUESTION # 74 ---

JAN 23 2001 12:51 PM FR DEXEY BRLANTINE LLP 59 6033 TO 982916859497812 5 49

Produced by RJRTC

52434 5738

BEST
COPY

-DUMMY QUESTION

Questionnaire name: 9196
Page: 20

04/28/00 - 2:16 PM

GO TO Q. # 75 -> < 1 > ASKED Q.32A
GO TO Q. # 75 -> < 2 > B

- QUESTION # 75 -

```

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 69 EQ 1002 TO 1002 (CONDITIONAL # 51)
OR Q# 72 EQ 1002 TO 1002 (CONDITIONAL # 52)
THEN GO TO Q. # 75 ELSE GO TO Q. # 76.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 69 EQ 1001 TO 1001 (CONDITIONAL # 76)
AND Q# 70 EQ 1001 TO 1002 (CONDITIONAL # 57)
THEN GO TO Q. # 75 ELSE GO TO Q. # 76.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 72 EQ 1001 TO 1001 (CONDITIONAL # 58)
AND Q# 73 EQ 1001 TO 1002 (CONDITIONAL # 59)
THEN GO TO Q. # 75 ELSE GO TO Q. # 76.

```

-DUMMY QUESTION TO EVALUATE Q.51 & Q.52 - DN/REF
GO TO Q. # 77 -> < 1 > SKIP TO Q.56
GO TO Q. # 77 -> < 2 > B

- QUESTION # 76 -

```

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 74 EQ CODE(S) 1 (CONDITIONAL # 60)
THEN SHOW CODES 1
AND HIDE CODES 1

```

-DUMMY QUESTION TO EVALUATE EQ.51

GO TO Q. # 77 -> < 1 > ASKED Q.51
GO TO Q. # 77 -> < 2 > ASKED Q.51A

- QUESTION # 77 -

```

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 74 EQ CODE(S) 1 (CONDITIONAL # 61)
THEN SHOW CODES 2
AND HIDE CODES 1

```

-DUMMY QUESTION TO EVALUATE EQ.52

GO TO Q. # 78 -> < 1 > ASKED Q.52
GO TO Q. # 78 -> < 2 > ASKED Q.52A

- QUESTION # 78 -

```

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 76 EQ CODE(S) 1 (CONDITIONAL # 62)
AND Q# 77 EQ CODE(S) 1 (CONDITIONAL # 63)
AND Q# 72 EQ Q# 69 (CONDITIONAL # 64)
THEN GO TO Q. # 79 ELSE GO TO Q. # 78.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 76 EQ CODE(S) 1 (CONDITIONAL # 65)
AND Q# 77 EQ CODE(S) 2 (CONDITIONAL # 66)
AND Q# 73 EQ Q# 69 (CONDITIONAL # 67)
THEN GO TO Q. # 79 ELSE GO TO Q. # 78.
<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
IF Q# 76 EQ CODE(S) 2 (CONDITIONAL # 68)

```

JAN 23 2001 12:51 PM FR DEWEY BALLRINE LLP.59 6003 TO 902916859457#12 85

52434 5739

AND Q8 77 EQ CODE(S) 1 (CONDITIONAL # 68)
 AND Q8 72 EQ Q8 70 (CONDITIONAL # 70)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

Questionnaire NAME: P196
 Page: 31

01/25/89 - 3:16 PM

IF Q8 76 EQ CODE(S) 2 (CONDITIONAL # 71)
 AND Q8 77 EQ CODE(S) 2 (CONDITIONAL # 72)
 AND Q8 73 EQ Q8 70 (CONDITIONAL # 73)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 74)
 AND Q8 77 EQ CODE(S) 1 (CONDITIONAL # 75)
 AND Q8 73 LT Q8 63 (CONDITIONAL # 76)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 77)
 AND Q8 77 EQ CODE(S) 2 (CONDITIONAL # 78)
 AND Q8 73 LT Q8 63 (CONDITIONAL # 79)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 80)
 AND Q8 77 EQ CODE(S) 1 (CONDITIONAL # 81)
 AND Q8 73 LT Q8 70 (CONDITIONAL # 82)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 2 (CONDITIONAL # 83)
 AND Q8 77 EQ CODE(S) 2 (CONDITIONAL # 84)
 AND Q8 73 LT Q8 70 (CONDITIONAL # 85)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 86)
 AND Q8 77 EQ CODE(S) 1 (CONDITIONAL # 87)
 AND Q8 73 EQ Q8 63 (CONDITIONAL # 88)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 89)
 AND Q8 77 EQ CODE(S) 2 (CONDITIONAL # 90)
 AND Q8 73 EQ Q8 63 (CONDITIONAL # 91)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 92)
 AND Q8 77 EQ CODE(S) 1 (CONDITIONAL # 93)
 AND Q8 73 EQ Q8 70 (CONDITIONAL # 94)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q8 76 EQ CODE(S) 1 (CONDITIONAL # 95)
 AND Q8 77 EQ CODE(S) 2 (CONDITIONAL # 96)
 AND Q8 73 EQ Q8 70 (CONDITIONAL # 97)
 THEN GO TO Q.8 75 ELSE GO TO Q.8 78.
 *DUMMY QUESTION TO EVALUATE U.51 & Q.52
 GO TO Q.8 78 << 1 >>
 GO TO Q.8 78 << 2 >>

Produced by RJRTC

JAN 23 2001 12:51 AM FR DEWEY BALLRNTINE LLP.59 6333 10 982916859497812 51

52434 5740

BEST COPY

*** QUESTION # 79 ***
 -DUMMY QUESTION TO EVALUATE PQ.52 - PQ.51
 GO TO Q. # 84 -> < 1 > ASK Q84
 GO TO Q. # 84 -> < 2 > 4
 *** QUESTION # 80 ***
 -DUMMY QUESTION TO EVALUATE PQ.52 < PQ.51

Questionnaire name: 0196
 Page: 22

08/23/00 - 2:14 PM

GO TO Q. # 86 -> < 1 > ASK Q55
 GO TO Q. # 86 -> < 2 > 4

*** QUESTION # 81 ***
 -DUMMY QUESTION TO EVALUATE PQ.52 > PQ.51
 GO TO Q. # 82 -> < 1 > ASK Q.53
 GO TO Q. # 82 -> < 2 > 4

*** QUESTION # 82 ***
 '82' > 51

Q.53 You said that the SMOKERS are MORE likely to get lung cancer than the NON-smokers. How certain are you about that... (READ CHOICES IN ORDER THEY APPEAR AND ENTER PUNCH CAREFULLY)

[Q25A1] 888
 [Q25A2] 888
 [Q25A3] 888
 [Q25A4] 888
 [Q25A5] 888
 GO TO Q. # 82 -> < 1 > "Extremely certain"
 GO TO Q. # 82 -> < 2 > "Very certain"
 GO TO Q. # 82 -> < 3 > "Somewhat certain"
 GO TO Q. # 82 -> < 4 > "Slightly certain"
 GO TO Q. # 82 -> < 5 > "Not certain at all"
 GO TO Q. # 82 -> < 6 > (VOL) Don't know
 GO TO Q. # 82 -> < 7 > (VOL) Refused

*** QUESTION # 83 ***
 (Q.53 - Don't know)

I'll make a note of that. If you don't mind, it would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

Q.53A- You said that the SMOKERS are MORE likely to get lung cancer than the NON-smokers. How certain are you about that... (READ CHOICES IN ORDER THEY APPEAR AND ENTER PUNCH CAREFULLY)

[Q25A1] 888
 [Q25A2] 888
 [Q25A3] 888
 [Q25A4] 888

produced by RJRTC

JAN 23 2001 12:51 PM FR DEWEY BALLANTINE LLP 59 6033 TO 902915#659497#1

52434 5741

BEST
COPY

GO TO Q. 1 88 ----> < 4 > "Slightly certain"
 GO TO Q. 1 88 ----> < 5 > "Not certain at all"
 GO TO Q. 1 88 ----> < 6 > (VOL) Don't know
 GO TO Q. 1 88 ----> < 7 > (VOL) Refused

--- QUESTION 4 86 ---
 Q2 = Q31

-Q.55- You said that the SMOKERS are LESS likely to get lung cancer than the NON-smokers.

How certain are you about that... (READ CHOICES IN ORDER THEY APPEAR AND ENTER NUMBER CAREFULLY)

. (Q23A1)899
 . (Q23A2)899

Questionnaire name: 9156
 Page: 21

08/25/00 - 2:15 PM

. (Q23A1)899
 . (Q23A2)899
 . (Q23A3)899
 GO TO Q. 1 88 ----> < 1 > "Extremely certain"
 GO TO Q. 1 88 ----> < 2 > "Very certain"
 GO TO Q. 1 88 ----> < 3 > "Somewhat certain"
 GO TO Q. 1 88 ----> < 4 > "Slightly certain"
 GO TO Q. 1 88 ----> < 5 > "Not certain at all"
 GO TO Q. 1 88 ----> < 6 > (VOL) Don't know
 GO TO Q. 1 88 ----> < 7 > (VOL) Refused

--- QUESTION 4 87 ---
 (Q.55 - Don't know)

I'll make a note of that. If you don't mind, it would really help us
 out if you could also get your BEST GUESS, even if you're not
 completely sure.

Will I read the question one more time?

-Q.55A- You said that the SMOKERS are LESS likely to get lung cancer than the NON-smokers.

How certain are you about that... (READ CHOICES IN ORDER THEY APPEAR AND ENTER NUMBER CAREFULLY)

. (Q23A1)899
 . (Q23A2)899
 . (Q23A3)899
 . (Q23A4)899
 . (Q23A5)899
 GO TO Q. 1 88 ----> < 1 > "Extremely certain"
 GO TO Q. 1 88 ----> < 2 > "Very certain"
 GO TO Q. 1 88 ----> < 3 > "Somewhat certain"
 GO TO Q. 1 88 ----> < 4 > "Slightly certain"
 GO TO Q. 1 88 ----> < 5 > "Not certain at all"

JAN 23 2001 12:52 PM FR DEXEY BULLPINE LLP.59 6030 TO 982916M659497412 P.54

52434 5743

BEST
COPY

GO TO Q. # 38 ----- < 6 > (VOL) Don't know
GO TO Q. # 38 ----- < 7 > (VOL) Refused

*** QUESTION # 38 ***

-Q.38- Do you PERSONALLY believe that smoking cigarettes increases a person's chances of getting lung cancer, or do you believe that smoking cigarettes does NOT increase a person's chances of getting lung cancer?

GO TO Q. # 39 ----- < 1 > Does increase
GO TO Q. # 39 ----- < 2 > Does NOT increase
GO TO Q. # 39 ----- < 3 > (VOL) Don't know
GO TO Q. # 39 ----- < 4 > (VOL) Refused

*** QUESTION # 39 ***

(Q.39 = Don't know)

I'll make a note of that. If you don't mind, it would really help us a lot if you would also get your BEST GUESS, even if you're not completely sure.

Questionnaire name: 7196
Page: 25

08/25/00 - 2:16 PM

Shall I read the question one more time?

-Q.39- Do you PERSONALLY believe that smoking cigarettes increases a person's chances of getting lung cancer, or do you believe that smoking cigarettes does NOT increase a person's chances of getting lung cancer?

GO TO Q. # 40 ----- < 1 > Does increase
GO TO Q. # 40 ----- < 2 > Does NOT increase
GO TO Q. # 40 ----- < 3 > (VOL) Don't know
GO TO Q. # 40 ----- < 4 > (VOL) Refused

*** QUESTION # 40 ***

-Q.40- How certain are you about your answer to that question... (READ CHOICES TO CANDIDATE TEST APPEAR AND ENTER PUNCH CARDS/KEYS)

• (Q41A)199
• (Q41B)199
• (Q41C)199
• (Q41D)199
• (Q41E)199

GO TO Q. # 41 ----- < 1 > Extremely certain
GO TO Q. # 41 ----- < 2 > Very certain
GO TO Q. # 41 ----- < 3 > Somewhat certain
GO TO Q. # 41 ----- < 4 > Slightly certain
GO TO Q. # 41 ----- < 5 > Not certain at all
GO TO Q. # 41 ----- < 6 > (VOL) Don't know
GO TO Q. # 41 ----- < 7 > (VOL) Refused

*** QUESTION # 41 ***

(Q.41 = Don't know)

JAN 23 2001 12:52 PM FR DEWEY BALLRINE LLP 59 6033 TO 9829165659497M12

produced by RJRTC

52434 5744

BEST
COPY

I'll make a note of that. If you don't mind, it would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q. 17a- How certain are you about your answer to that question... (READ CHOICES IN ORDER THEY APPEAR AND ENTER NUMBER CAREFULLY)

(Q25A1)111
 (Q25A2)111
 (Q25A3)111
 (Q25A4)111
 (Q25A5)111
 GO TO Q. 1 92 --- < 1 > "Extremely certain"
 GO TO Q. 2 92 --- < 2 > "Very certain"
 GO TO Q. 3 92 --- < 3 > "Somewhat certain"
 GO TO Q. 4 92 --- < 4 > "Slightly certain"
 GO TO Q. 5 92 --- < 5 > "Not certain at all"
 GO TO Q. 6 92 --- < 6 > (VOL) Don't know
 GO TO Q. 7 92 --- < 7 > (VOL) Refused

--- QUESTION 1 92 ---

Questionnaire Item: 3196

08/25/00 - 2:16 AM

Page: 26

Q.180- Do you WISH at all, that you had NEVER started to smoke cigarettes, or do you NOT wish that at all?

(INTERVIEWER: IF RESPONDENT IS UNDECIDED, ASK: "How do you feel right now?" -- REPEAT QUESTION)

GO TO Q. 1 95 --- < 1 > Do wish
 GO TO Q. 2 95 --- < 2 > Do NOT wish
 GO TO Q. 3 95 --- < 3 > (VOL) Don't know
 GO TO Q. 4 95 --- < 4 > (VOL) Refused

--- QUESTION 1 93 ---

Q.180 - (Repeat above)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.180a- Do you WISH at all, that you had NEVER started to smoke cigarettes, or do you NOT wish that at all?

(INTERVIEWER: IF RESPONDENT IS UNDECIDED, ASK: "How do you feel right now?" -- REPEAT QUESTION)

GO TO Q. 1 94 --- < 1 > Do wish
 GO TO Q. 2 94 --- < 2 > Do NOT wish
 GO TO Q. 3 94 --- < 3 > (VOL) Don't know
 GO TO Q. 4 94 --- < 4 > (VOL) Refused

JAN 23 2001 12:52 AM FR DEXEY BULLNINE LLP, 59 6033 TO 5029)6M659497M12 56

52434 5745

BEST
COPY

*** QUESTION # 94 ***

-Q.101- How much do you regret having started to smoke cigarettes...
(READ CHOICES IN ORDER THEY APPEAR AND ENTER PUNCH CAREFULLY)

[Q27A1]848
[Q27A2]848
[Q27A3]848
[Q27A4]848
GO TO Q. # 96 -> < 1 > "A great deal
GO TO Q. # 96 -> < 2 > "Quite a bit
GO TO Q. # 96 -> < 3 > "Somewhat
GO TO Q. # 96 -> < 4 > "A little
GO TO Q. # 96 -> < 5 > "(VOL) Don't know
GO TO Q. # 96 -> < 6 > "(VOL) Refused

*** QUESTION # 95 ***

(Q.101 - Don't know)

I'll make a note of that. It would really help us a lot if I could
also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.101A- How much do you regret having started to smoke cigarettes...
(READ CHOICES IN ORDER THEY APPEAR AND ENTER PUNCH CAREFULLY)

[Q27A1]848

Questionnaire name: 9196

08/25/00 - 2:16 PM

Page: 27

[Q27A2]848
[Q27A3]848
[Q27A4]848
GO TO Q. # 96 -> < 1 > "A great deal
GO TO Q. # 96 -> < 2 > "Quite a bit
GO TO Q. # 96 -> < 3 > "Somewhat
GO TO Q. # 96 -> < 4 > "A little
GO TO Q. # 96 -> < 5 > "(VOL) Don't know
GO TO Q. # 96 -> < 6 > "(VOL) Refused

*** QUESTION # 96 ***

-Q.102- When you think about having smoked cigarettes in the past,
does that make you feel unhappy at all, or does it NOT make you feel
unhappy?

GO TO Q. # 97 -> < 1 > Does
GO TO Q. # 97 -> < 2 > Does NOT
GO TO Q. # 97 -> < 3 > "(VOL) Don't know
GO TO Q. # 97 -> < 4 > "(VOL) Refused

*** QUESTION # 97 ***

(Q.102 - Don't know)

I'll make a note of that. It would really help us a lot if I could
also get your BEST GUESS, even if you're not completely sure.

JAN 23 2001 12:52 AM FR DEWEY BALLANTINE LLP.59 6333 TO 9029168559497M12.57

produced by RJRTC

52434 5746

Shall I read the question one more time?

-Q.101A- When you think about having smoked cigarettes in the past, does that make you feel unhappy at all, or does it NOT make you feel unhappy?

GO TO Q. 9100 ----- < 1 > Does
GO TO Q. 9103 ----- < 2 > Does NOT
GO TO Q. 9108 ----- < 3 > (VOL) DON'T KNOW
GO TO Q. 9109 ----- < 4 > (VOL) Refused

*** QUESTION # 98 ***

-Q.102- How unhappy does it make you feel... (READ CHOICES IN ORDER THEY APPEAR AND ENTER PUNCH CAREFULLY)

GO TO Q. 9100 ----- < 1 > "Extremely unhappy"
GO TO Q. 9101 ----- < 2 > "Very unhappy"
GO TO Q. 9102 ----- < 3 > "Somewhat unhappy"
GO TO Q. 9103 ----- < 4 > "Slightly unhappy"
GO TO Q. 9104 ----- < 5 > (VOL) Don't know
GO TO Q. 9105 ----- < 6 > (VOL) Refused

*** QUESTION # 99 ***
(Q.101) - Don't know

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Questionnaire Num: 9196

06/25/00 - 2:16 PM

Page: 26

Shall I read the question one more time?

-Q.102A- How unhappy does it make you feel... (READ CHOICES IN ORDER THEY APPEAR AND ENTER PUNCH CAREFULLY)

GO TO Q. 9100 ----- < 1 > "Extremely unhappy"
GO TO Q. 9101 ----- < 2 > "Very unhappy"
GO TO Q. 9102 ----- < 3 > "Somewhat unhappy"
GO TO Q. 9103 ----- < 4 > "Slightly unhappy"
GO TO Q. 9104 ----- < 5 > (VOL) Don't know
GO TO Q. 9105 ----- < 6 > (VOL) Refused

*** QUESTION #100 ***

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

IF Q9 34 EQ CODE(6) 1

(CONDITIONAL # 34)

OR Q9 34 EQ CODE(5) 1

(CONDITIONAL # 35)

THEN GO TO Q.9109 ELSE GO TO Q.9106.

Produced by RJRTC

JAN 23 2001 12:52 PM FR DEWEY BALLPINE LLP 59 6003 TO 902916#6559497#12

52434 5747

Q.101 Would you like to stop smoking cigarettes, or would you NOT like to stop smoking cigarettes?

(INTERVIEWER: IF RESPONDENT IS UNDECIDED, ASK:
"How do you feel right now?" -- REPEAT QUESTION)
GO TO Q. #102 ----> < 1 > Would like to
GO TO Q. #104 ----> < 2 > Would NOT like to
GO TO Q. #101 ----> < 3 > (VOL) Don't know
GO TO Q. #104 ----> < 4 > (VOL) Refused

*** QUESTION #101 ***
(Q.101 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

Q.101A- Would you like to stop smoking cigarettes, or would you NOT like to stop smoking cigarettes?

(INTERVIEWER: IF RESPONDENT IS UNDECIDED, ASK:
"How do you feel right now?" -- REPEAT QUESTION)
GO TO Q. #102 ----> < 1 > Would like to
GO TO Q. #104 ----> < 2 > Would NOT like to
GO TO Q. #101 ----> < 3 > (VOL) Don't know
GO TO Q. #104 ----> < 4 > (VOL) Refused

*** QUESTION #102 ***
Q.102- How much would you like to stop smoking cigarettes... (READ CHOICES IN ORDER, THEY APPEAR AND ENTER PUNCH CAREFULLY)

Questionnaire #102
Page: 29

08/25/00 - 2:16 PM

Q27A1102
Q27A2102
Q27A3102
Q27A4102
GO TO Q. #102 ----> < 1 > "A great deal
GO TO Q. #104 ----> < 2 > "Quite a bit
GO TO Q. #104 ----> < 3 > "Somewhat
GO TO Q. #104 ----> < 4 > "A little
GO TO Q. #101 ----> < 5 > (VOL) Don't know
GO TO Q. #104 ----> < 6 > (VOL) Refused

*** QUESTION #103 ***
Q.103 - Don't know

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

JAN 23 2001 12:53 AM FR DEWEY BULLRINE LLP.59 5003 TO 9029158559497412 59

52434 5748

BEST COPY

-Q.105A- How much would you like to stop smoking cigarettes... (READ CHOICES IN ORDER THEY APPEAR AND ENTER POWER CAREFULLY)

(Q27A1) 114
(Q27A2) 148
(Q27A3) 112
(Q27A4) 114
GO TO Q. 1104 >>> < 1 > "A great deal
GO TO Q. 1104 >>> < 2 > "Quite a bit
GO TO Q. 1104 >>> < 3 > "Somewhat
GO TO Q. 1104 >>> < 4 > "A little
GO TO Q. 1104 >>> < 5 > "(VOL) Don't know
GO TO Q. 1104 >>> < 6 > "(VOL) Refused

--- QUESTION 1104 ---

-Q.106- How likely is it that you will try to quit smoking during the next 3 months... (READ CHOICES IN ORDER THEY APPEAR AND ENTER POWER CAREFULLY)

(Q28A1) 114
(Q28A2) 148
(Q28A3) 112
(Q28A4) 114
(Q28A5) 114
GO TO Q. 1106 >>> < 1 > "Definitely will try
GO TO Q. 1106 >>> < 2 > "Probably will try
GO TO Q. 1106 >>> < 3 > "May or may not try
GO TO Q. 1106 >>> < 4 > "Probably will not try
GO TO Q. 1106 >>> < 5 > "Definitely will not try
GO TO Q. 1106 >>> < 6 > "(VOL) Don't know
GO TO Q. 1106 >>> < 7 > "(VOL) Refused

--- QUESTION 1106 ---
(Q.106 - "Don't know")

"I'll make a note of that. It would really help us a lot if I could

Questionnaire also: 1106
Page: 30

00/23/00 - 2:16 PM

also get your BEST QUOTE, even if you're not completely sure.

Shall I read the question one more time?

-Q.106A- How likely is it that you will try to quit smoking during the next 3 months... (READ CHOICES IN ORDER THEY APPEAR AND ENTER POWER CAREFULLY)

(Q29A1) 114
(Q29A2) 148
(Q29A3) 112
(Q29A4) 114
(Q29A5) 114
GO TO Q. 1106 >>> < 1 > "Definitely will try
GO TO Q. 1106 >>> < 2 > "Probably will try
GO TO Q. 1106 >>> < 3 > "May or may not try

JAN 23 2001 12:53 PM FR DEWEY BELLINI LINE LLP.59 EC03 TO 9829168559497812 * 50

produced by RJRTC

52434 5749

BEST COPY

GO TO Q. #105 < 1 > Probably will not try
GO TO Q. #106 < 2 > Definitely will not try
GO TO Q. #106 < 3 > (VOL) Don't know
GO TO Q. #106 < 4 > (VOL) Refused

--- QUESTION #106 ---
THE LAST QUESTIONS I HAVE ARE FOR STATISTICAL PURPOSES ONLY.

-Q.300- Please, in what year were you born?

(ENTER 4-DIGIT YEAR: RANGE 1900-1984;
DON'T KNOW - 1905; REFUSED - 1984)
GO TO Q. #107 < 1 > NUMERIC OPEN END (1900-1984)
-- NUMERIC OPEN END - RANGE IS 1900, THEN 1984. --
-- ANSWER REQUIRED --

--- QUESTION #107 ---

*CORRECT QUESTION
GO TO Q. #108 < 1 > ?
GO TO Q. #108 < 2 > ?

--- QUESTION #108 ---

-Q.301- Are you, yourself, of Hispanic or Latino background, such as Mexican, Puerto Rican, Cuban, or some other Latin American background?
GO TO Q. #109 < 1 > Yes
GO TO Q. #110 < 2 > No
GO TO Q. #109 < 3 > Don't know
GO TO Q. #111 < 4 > Refused

--- QUESTION #109 ---

(Q.301 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.301A- Are you, yourself, of Hispanic or Latino background, such as Mexican, Puerto Rican, Cuban, or some other Latin American background?

Questionnaire name: PIPE
Page: 31

01/25/80 - 2:16 PM

GO TO Q. #110 < 1 > Yes
GO TO Q. #111 < 2 > No
GO TO Q. #111 < 3 > Don't know
GO TO Q. #111 < 4 > Refused

--- QUESTION #110 ---

*301-1 OR 301A-1 CORRECT QUESTION FOR Q.301A READ-IN / MULTI
GO TO Q. #111 < 1 > Do you consider yourself a WHITE
Hispanic/Latino or a BLACK
GO TO Q. #111 < 2 > Hispanic/Latino? (THEN CHASE AS WHITE
-1- OR
BLACK -2- IF

JAN 23 2001 12:53 PM FR DOWEY BALLANTINE LLP 59 6333 TO 90291585949781 51

52434 5750

GO TO Q. #111 --> < 3 > RESPONDENT REFUSED TO CHOOSE BETWEEN WHITE OR

BLACK BISTANIC.

GO TO Q. #111 --> < 4 > (USE AS OTHER #11)

-- MULTI-PUNCH --

*** QUESTION #111 ***

-Q. 301A- What is your race?

(Q110A1)044

(Q110A2)050

(Q110A3)060

(Q110A4)060

(DO NOT READ LIST)

GO TO Q. #113 --> < 1 > White/Caucasian

GO TO Q. #113 --> < 2 > Black/African-American

GO TO Q. #113 --> < 3 > Asian

GO TO Q. #113 --> < 4 > Other or mixed race (SPECIFY)

-- ABOVE ANSWERS ASSOCIATED WITH OPEN END QUESTION #112 --

GO TO Q. #113 --> < 5 > 1

GO TO Q. #113 --> < 6 > 2

GO TO Q. #113 --> < 7 > 3

GO TO Q. #113 --> < 8 > Don't Know

GO TO Q. #113 --> < 9 > Refused

GO TO Q. #113 --> < 10 > 4

GO TO Q. #113 --> < 11 > 5

GO TO Q. #113 --> < 12 > 6

*** QUESTION #112 ***

-Q. 301A- What is your race?

GO TO Q. #113 --> < 1 > ASSOCIATED OPEN END

-- MULTI-PUNCH --

-- ANSWER REQUIRED --

*** QUESTION #112 ***

(Q. 301A - Don't Know)

Will make a guess of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q. 301A- What is your race?

(Q110A1)060

(Q110A2)060

Questionnaire Number: 9196

08/15/00 - 2:16 PM

Page: 13

(Q110A3)060

(Q110A4)060

(DO NOT READ LIST)

GO TO Q. #113 --> < 1 > White/Caucasian

GO TO Q. #113 --> < 2 > Black/African-American

GO TO Q. #113 --> < 3 > Asian

JAN 23 2001 12:53 AM FR DEWEY BALLANTINE LLP.59 6033 TO 902915865594974 P 62

BEST
COPY

GO TO Q. #115 --> < 4 > Other or mixed race (SPECIFY)
 -- ABOVE ANSWER ASSOCIATED WITH OPEN END QUESTION #114 --
 GO TO Q. #115 --> < 5 > 4
 GO TO Q. #115 --> < 6 > 5
 GO TO Q. #115 --> < 7 > 6
 GO TO Q. #115 --> < 8 > Don't know
 GO TO Q. #115 --> < 9 > Refused
 GO TO Q. #115 --> < 10 > 4
 GO TO Q. #115 --> < 11 > 5
 GO TO Q. #115 --> < 12 > 6

*** QUESTION #114 ***
 -Q.301A- Enter other race
 GO TO Q. #115 --> < 1 > ASSOCIATED OPEN END
 -- MULTI-PUNCH --
 -- ANSWER REQUIRED --

*** QUESTION #115 ***
 -Q.302- What is the highest grade of school or year of college you
 have completed? (DO NOT READ LIST)
 GO TO Q. #117 --> < 1 > 1
 GO TO Q. #117 --> < 2 > 2
 GO TO Q. #117 --> < 3 > 3
 GO TO Q. #117 --> < 4 > 4
 GO TO Q. #117 --> < 5 > 5
 GO TO Q. #117 --> < 6 > 6
 GO TO Q. #117 --> < 7 > 7
 GO TO Q. #117 --> < 8 > 8
 GO TO Q. #117 --> < 9 > 9
 GO TO Q. #117 --> < 10 > 10
 GO TO Q. #117 --> < 11 > 11
 GO TO Q. #117 --> < 12 > 12
 GO TO Q. #117 --> < 13 > At least some college
 GO TO Q. #117 --> < 14 > Don't know
 GO TO Q. #117 --> < 15 > Refused

*** QUESTION #117 ***
 (Q.302 - Don't know)

I'll make a note of that. It would really help us a lot if I could
 get some more data, even if you're not completely sure.

Shall I read the question one more time?

-Q.302A- What is the highest grade of school or year of college you
 have completed? (DO NOT READ LIST)
 GO TO Q. #117 --> < 1 > 1
 GO TO Q. #117 --> < 2 > 2

Questionnaire name: 9196
 Page: 33

08/23/00 - 2:16 PM

GO TO Q. #117 --> < 3 > 3
 GO TO Q. #117 --> < 4 > 4
 GO TO Q. #117 --> < 5 > 5
 GO TO Q. #117 --> < 6 > 6

JAN 23 2001 12:53 PM FR DEWEY BALLANTINE LLP.59 6033 TO 9029168559497812 53

52434 5752

BEST
COPY

GO TO Q. #117 -> < 1 > 7
GO TO Q. #117 -> < 8 > 8
(A) TO Q. #117 -> < 9 > 9
GO TO Q. #117 -> < 10 > 10
GO TO Q. #117 -> < 11 > 11
GO TO Q. #117 -> < 12 > 12
GO TO Q. #119 -> < 13 > at least some college
GO TO Q. #117 -> < 14 > Don't know
GO TO Q. #117 -> < 15 > Refused

*** QUESTION #117 ***

1302-1-12.14.15

-Q.103- Have you received your High School Diploma or High School
Equivalency Diploma or GED?

GO TO Q. #119 -> < 1 > Yes
GO TO Q. #119 -> < 2 > No
GO TO Q. #118 -> < 3 > Don't know
GO TO Q. #118 -> < 4 > Refused

*** QUESTION #118 ***

(Q.103 - Don't know)

I'll make a note of that. It would really help us a lot if I could
also get your BEST GEDS, even if you're not completely sure.

Shall I read the question one more time?

-Q.103A- Have you received your High School Diploma or High School
Equivalency Diploma or GED?

GO TO Q. #119 -> < 1 > Yes
GO TO Q. #119 -> < 2 > No
GO TO Q. #118 -> < 3 > Don't know
GO TO Q. #118 -> < 4 > Refused

*** QUESTION #119 ***

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

IF Q119 EQ CODE(3) 1N-15

(CONDITIONAL # 36)

OR Q119 EQ CODE(8) 13-15

(CONDITIONAL # 37)

THEN GO TO Q. #119 ELSE GO TO Q. #121.

1302-13-15

-Q.103A- What is the highest degree or any that you have earned?

(DO NOT READ THIS)

GO TO Q. #121 -> < 1 > Some college. No degree
GO TO Q. #121 -> < 2 > Associate Degree (AA)
GO TO Q. #121 -> < 3 > Bachelor's Degree
GO TO Q. #121 -> < 4 > Master's Degree
GO TO Q. #121 -> < 5 > Doctorate/Advanced Degree
GO TO Q. #120 -> < 6 > (VOL.) High school diploma or equivalency

test

GO TO Q. #120 -> < 7 > (VOL.) Don't know
GO TO Q. #120 -> < 8 > (VOL.) Refused

*** QUESTION #120 ***

Questionnaire name: 9106

08/25/00 - 3:16 PM

Page: 31

JAN 23 2001 12:54 PM FR DEWEY BALLANTINE LLP.59 6333 TO 9029158559497812 P.54

52434 5753

(Q.303A - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.303A.A- What is the highest degree if any that you have earned?

(DO NOT READ LIST)

GO TO Q. #121 >>>> < 1 > Some college, No degree
GO TO Q. #121 >>>> < 2 > Associate Degree (AA)
GO TO Q. #121 >>>> < 3 > Bachelor's Degree
GO TO Q. #121 >>>> < 4 > Master's Degree
GO TO Q. #121 >>>> < 5 > Doctorate/Advanced Degree
GO TO Q. #121 >>>> < 6 > (VOL) High school diploma or equivalency
Test
GO TO Q. #121 >>>> < 7 > (VOL) Don't know
GO TO Q. #121 >>>> < 8 > (VOL) Refused

*** QUESTION #121 ***

-Q.306- How many different telephone NUMBERS do you have in your home?
(DO NOT READ LIST)

(IF MORE THAN "1" VERIFY: "That means you have ___ different telephone NUMBERS at home?")

GO TO Q. #125 >>>> < 1 > 1
GO TO Q. #125 >>>> < 2 > 2
GO TO Q. #125 >>>> < 3 > 3
GO TO Q. #125 >>>> < 4 > 4
GO TO Q. #125 >>>> < 5 > 5 or more
GO TO Q. #125 >>>> < 6 > Don't know
GO TO Q. #125 >>>> < 7 > Refused

*** QUESTION #122 ***

(Q.306 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.306A- How many different telephone NUMBERS do you have in your home?

(DO NOT READ LIST)

(IF MORE THAN "1" VERIFY: "That means you have ___ different telephone NUMBERS at home?")

GO TO Q. #125 >>>> < 1 > 1
GO TO Q. #125 >>>> < 2 > 2
GO TO Q. #125 >>>> < 3 > 3
GO TO Q. #125 >>>> < 4 > 4
GO TO Q. #125 >>>> < 5 > 5 or more
GO TO Q. #125 >>>> < 6 > Don't know
GO TO Q. #125 >>>> < 7 > Refused

*** QUESTION #123 ***

JAN 23 2001 12:54 PM FR DEWEY BALANTINE LLP 59 6033 TO 982916559497812 P.65

52434 5754

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>

Questionnaire name: 9196
Page: 35

08/25/00 - 2:16 PM

IF Q#121 EQ CODE(S) 2 (CONDITIONAL # 38)
 OR Q#122 EQ CODE(S) 2 (CONDITIONAL # 39)
 THEN SHOW CODES 1,6-8
 AND HIDE CODES 2-5
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 3 (CONDITIONAL # 40)
 OR Q#122 EQ CODE(S) 3 (CONDITIONAL # 41)
 THEN SHOW CODES 1,2,4-8
 AND HIDE CODES 3-5
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 4 (CONDITIONAL # 42)
 OR Q#122 EQ CODE(S) 4 (CONDITIONAL # 43)
 THEN SHOW CODES 1-3,6-8
 AND HIDE CODES 4,5
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 5 (CONDITIONAL # 44)
 OR Q#122 EQ CODE(S) 5 (CONDITIONAL # 45)
 THEN SHOW CODES 1-8
 AND HIDE CODES 3

1306-2-5

-Q.308- How many of these telephone numbers are never used for talking on the phone and instead are used only for a different reason, like a fax machine or computer modem? [DO NOT READ LIST]

GO TO Q. #123 < 1 > 1
 GO TO Q. #123 < 2 > 2
 GO TO Q. #123 < 3 > 3
 GO TO Q. #123 < 4 > 4
 GO TO Q. #123 < 5 > 5 or more
 GO TO Q. #123 < 6 > NONE
 GO TO Q. #123 < 7 > Don't know
 GO TO Q. #123 < 8 > Refused

*** QUESTION #124 ***

<< CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 2 (CONDITIONAL # 46)
 OR Q#122 EQ CODE(S) 2 (CONDITIONAL # 47)
 THEN SHOW CODES 1,6-8
 AND HIDE CODES 2-5
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 3 (CONDITIONAL # 48)
 OR Q#122 EQ CODE(S) 3 (CONDITIONAL # 49)
 THEN SHOW CODES 1,2,6-8
 AND HIDE CODES 3-5
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 4 (CONDITIONAL # 50)
 OR Q#122 EQ CODE(S) 4 (CONDITIONAL # 51)
 THEN SHOW CODES 1-3,6-8
 AND HIDE CODES 4,5
 << CONDITIONAL ASSOCIATED WITH THIS QUESTION >>
 IF Q#121 EQ CODE(S) 5 (CONDITIONAL # 52)
 OR Q#122 EQ CODE(S) 5 (CONDITIONAL # 53)

JAN 23 2001 12:54 AM FR DEXEY BRLNLINE LLP 59 6033 TO 9029158559497#12 P.55

52434 5755

JAN 23 2001 12:54 AM FR DEWEY BALLANTINE LLP.59 6033 TO 9029164559497012 P.67

Produced by RJR TC

I'll make a note of that. It would really help us a lot if I could also get your BEST CODES, even if you're not completely sure. Shall I read the question one more time?

-Q.306- How many of these telephone numbers are never used for talking on the phone and instead are used only for a different reason, like a fax machine or computer modem? (DO NOT READ LIST)

GO TO Q. #125 > 1 < 1
GO TO Q. #125 > 2 < 2
GO TO Q. #125 > 3 < 3
GO TO Q. #125 > 4 < 4
GO TO Q. #125 > 5 < 5 or more
GO TO Q. #125 > 6 < MORE
GO TO Q. #125 > 7 < Don't know
GO TO Q. #125 > 8 < Refused

... QUESTION #125 ...

-Q.309- For the year 1999, what was your household's total income, before taxes, from all sources, including salaries, wages, pensions, dividends, interest, and all other income? (DO NOT READ LIST)

GO TO Q. #127 > 1 < Less than \$10,000
GO TO Q. #127 > 2 < \$11,000 to \$20,000
GO TO Q. #127 > 3 < \$21,000 to \$30,000
GO TO Q. #127 > 4 < \$31,000 to \$40,000
GO TO Q. #127 > 5 < \$41,000 to \$50,000
GO TO Q. #127 > 6 < \$51,000 to \$60,000
GO TO Q. #127 > 7 < \$61,000 to \$75,000
GO TO Q. #127 > 8 < \$76,000 to \$100,000
GO TO Q. #127 > 9 < \$101,000 to \$150,000
GO TO Q. #127 > 10 < More than \$150,000
GO TO Q. #126 > 11 < Don't know
GO TO Q. #126 > 12 < Refused

... QUESTION #126 ...

109-11.12
-Q.311- OK. If it's all right with you, I'll read a series of ranges, and you can [unclear] me when I get to the range that your total household income for 1999, before taxes, falls in... (READ LIST SLOWLY UNTIL THE RESPONDENT SELECTS ONE)

GO TO Q. #127 > 1 < Less than \$10,000
GO TO Q. #127 > 2 < \$11,000 to \$20,000
GO TO Q. #127 > 3 < \$21,000 to \$30,000
GO TO Q. #127 > 4 < \$31,000 to \$40,000
GO TO Q. #127 > 5 < \$41,000 to \$50,000
GO TO Q. #127 > 6 < \$51,000 to \$60,000
GO TO Q. #127 > 7 < \$61,000 to \$75,000
GO TO Q. #127 > 8 < \$76,000 to \$100,000
GO TO Q. #127 > 9 < \$101,000 to \$150,000
GO TO Q. #127 > 10 < More than \$150,000
GO TO Q. #127 > 11 < Don't know
GO TO Q. #127 > 12 < Refused

08/25/00 - 2:16 PM

Questionnaire name: 9196

Page: 36

FROM FROM CODES 1-8
AND HIDE CODES 0
(Q.306 - Don't know)

BEST COPY

BEST
COPY

GO TO Q. #127 < 8 > \$76,000 to \$100,000
GO TO Q. #127 < 9 > \$101,000 to \$150,000
GO TO Q. #127 < 10 > More than \$150,000
GO TO Q. #127 < 11 > (VOL) Don't know
GO TO Q. #127 < 12 > (VOL) Refused

*** QUESTION #127 ***

-Q.312- Do you currently have health insurance that would pay for some

Questionnaire name: 919d
Page: 37

08/25/00 - 2:16 PM

or all of the costs of you getting medical care, or do you NOT have health insurance at this time?

GO TO Q. #128 < 1 > Have health insurance
GO TO Q. #128 < 2 > Do not have health insurance
GO TO Q. #128 < 3 > Don't know
GO TO Q. #131 < 4 > Refused

*** QUESTION #128 ***

(Q.312 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.312A- Do you currently have health insurance that would pay for some or all of the costs of you getting medical care, or do you NOT have health insurance at this time?

GO TO Q. #128 < 1 > Have health insurance
GO TO Q. #131 < 2 > Do not have health insurance
GO TO Q. #131 < 3 > Don't know
GO TO Q. #131 < 4 > Refused

*** QUESTION #129 ***

-Q.313- Is your health insurance from a company whose name includes the words "Blue Cross" or "Blue Shield", or is it from another company?

(INTERVIEWER: EXAMPLES OF HEALTH INSURANCE COMPANIES THAT YOU SHOULD INCLUDE FOR BLUE CROSS/BLUE SHIELD: Blue cross/Blue Shield of California and "Empire Blue Shield")

GO TO Q. #133 < 1 > Blue Cross/Blue Shield
GO TO Q. #131 < 2 > Another company
GO TO Q. #130 < 3 > (VOL) Don't know
GO TO Q. #131 < 4 > (VOL) Refused

*** QUESTION #130 ***

(Q.313 = Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

JAN 23 2001 12:55 AM FR DEWEY BILLING LINE LLP:59 6300 TO 982916#558497#2 P.66

52434 5757

BEST
COPY

-Q.313A- Is your health insurance from a company whose name includes the words "Blue Cross" or "Blue Shield", or is it from another company?

(INTERVIEWER: EXAMPLES OF HEALTH INSURANCE COMPANIES THAT YOU SHOULD INCLUDE FOR BLUE CROSS/BLUE SHIELD: Blue cross/Blue Shield of California and "Empire Blue Shield")

GO TO Q. #133 ----> < 1 > Blue Cross/Blue Shield
GO TO Q. #131 ----> < 2 > Another company
GO TO Q. #131 ----> < 3 > (VOL) Don't know
GO TO Q. #131 ----> < 4 > (VOL) Refused

*** QUESTION #131 ***

Questionnaire name: 9196
Page: 38

08/25/00 - 2:16 PM

-Q.314- Have you ever had health insurance from a company whose name includes the words "Blue Cross" or "Blue Shield", or have you NEVER had

health insurance from this company?

GO TO Q. #131 ----> < 1 > Did have it
GO TO Q. #131 ----> < 2 > Never had it
GO TO Q. #132 ----> < 3 > (VOL) Don't know
GO TO Q. #131 ----> < 4 > (VOL) Refused

*** QUESTION #132 ***

(Q.314 - Don't know)

I'll make a note of that. It would really help us a lot if I could also get your BEST GUESS, even if you're not completely sure.

Shall I read the question one more time?

-Q.314A- Have you ever had health insurance from a company whose name includes the words "Blue Cross" or "Blue Shield", or have you NEVER had

health insurance from this company?

GO TO Q. #133 ----> < 1 > Did have it
GO TO Q. #133 ----> < 2 > Never had it
GO TO Q. #133 ----> < 3 > (VOL) Don't know
GO TO Q. #133 ----> < 4 > (VOL) Refused

*** QUESTION #133 ***

I'd just like to verify that I reached you by dialing...

(01)000. Is that correct?

GO TO Q. #135 ----> < 1 > Yes
GO TO Q. #134 ----> < 2 > No
GO TO Q. #135 ----> < 3 > Refused

*** QUESTION #134 ***

At what number did I reach you?

GO TO Q. #135 ----> < 1 > Area code
-- RANGE IS 0. THRU 999. --
GO TO Q. #135 ----> < 2 > Exchange

Produced by RJRTC

JAN 23 2001 12:55 AM FR DEXEY BALLPINE LLP.59 6333 TO 982916#6559497#12 P.59

52434 5758

BEST
COPY

** TOTAL PAGE 28 **

-- RANGE IS 0. THRU 999. --
GO TO Q. #135 --> < 3 > Last 4 digits
-- RANGE IS 0. THRU 9999. --
GO TO Q. #135 --> < 4 > \$Refused (ENTER "1" ONLY IF "REFUSED";
ELSE
ENTER "--")
-- RANGE IS 1. THRU 1. --
-- MULTI-PUNCH --
-- NUMERIC CLOSED END --
*** QUESTION #135 ***
Thank you for you time. These are all the questions I have.
(PRESS ENTER TWICE TO CONTINUE)
GO TO Q. #136 --> < 1 > TEXT SCREEN
-- TEXT SCREEN --
*** QUESTION #136 ***
ENTER YOUR INITIALS TO EXIT CATI
GO TO Q. #137 --> < 1 > INITIALS

Questionnaire name: 9496
Page: 39

08/25/00 - 2:16 PM

-- ANSWER REQUIRED --

produced by RJJATC

in

HUMPHREY

JAN 23 2001 12:55 AM FR DEWEY BALLANTINE LLP.59 6033 TO 902916#659497#12 P.78

52434 5759